Handmade Burnished Ware in Late Bronze Age Greece and its makers

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A thesis submitted to
The University of Birmingham
for the degree of
DOCTOR OF PHILOSOPHY

VOLUME II: ILLUSTRATIONS

Institute of Archaeology and Antiquity The University of Birmingham February 2011

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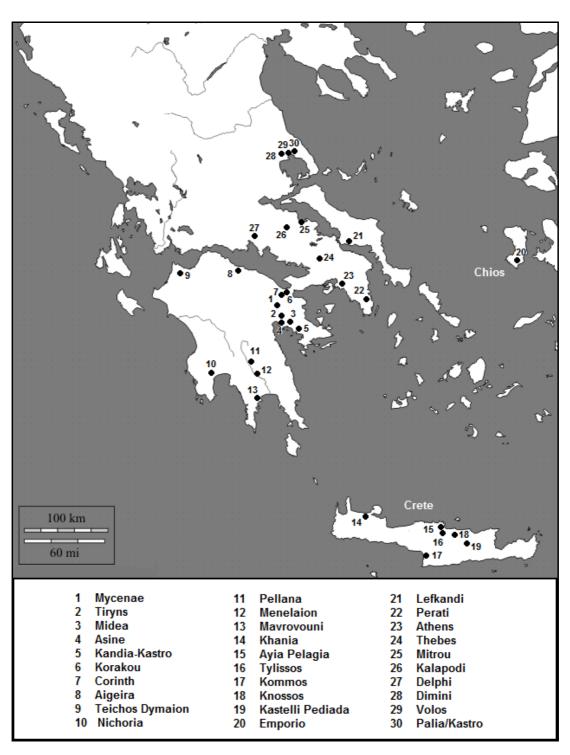
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Chapter 1:

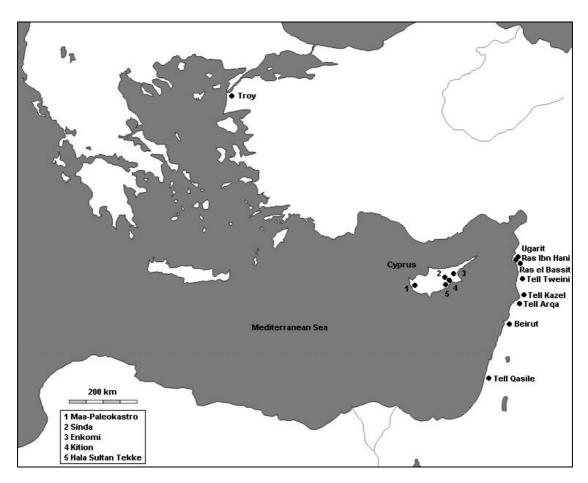
Corpus characterisation and contextual analysis

Figure 1.1: Map of Mycenaean and Minoan sites mentioned in text



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Figure 1.2: Map of Eastern Mediterranean sites mentioned in text



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Figure 1.3: Chronological correlations table for Mycenaean/Minoan sites

Chronology ¹	Mycenae ² , Phases	Tiryns³, Horizons	Khania⁴	Rutter 1977	Korakou ⁵ , Trenches	Aigeira ⁶ , Phase	Lefkandi ⁷ , Phase
LH IIIB1	VIB		LM IIIB1				
LH IIIB Middle/ LH IIIB2 Early	VII	16					
LH IIIB2 Late or Transitional	VIII	Dev.:17 Final:17, 18	LM IIIB2				
Part of Transitional? 8	Early			1?	VI-V		1a
and LH IIIC Early 1	IX	19	LM IIIB2- Mainly	2		Ia-Ib	1a
LH IIIC Early 2	Tower X		IIIC Early	3			1a- Mainly 1b
LH IIIC Middle	Dev. XI	20	LM IIIC Early-	4 Early		Ib	Mainly 1b- 2a
LH IIIC Middle 2	Adv. XI	21	Mainly IIIC Late	4 Late		II	Mainly 2a- 2b
LH IIIC Late	Final	22	LM IIIC Late	5 Early		II?	2b-3
and Submycenaean?	XII	23	Subminoan?	5 Late		11 ?	20-3

Partially based on: Vitale 2006; Mountjoy 2007; French, Stockhammer 2009.

WBM 13: table 1; French, Stockhammer 2009: table 3.

French, Stockhammer 2009: table 4.

Hallager 2007: table 1.

Rutter 1974; Vitale 2006.

Deger-Jalkotzy 2003; Alram-Stern, Deger-Jalkotzy 2006: beilage 1.

Verstion marks indicate that the correlation is broath vital.

⁸ Question marks indicate that the correlation is hypothetical.

Figure 1.4: Table of HBW quantity per phase

			H/LM III	В	LH/LM IIIC				m	
Sites ⁹	Total published	Early/ B1	B Middle / B2 Early	B2 Late/ Trans	Ea	arly 2	Mic 1/ Dev	ddle 2/ Adv	Late/ Final	Submycenaean
Khania	121(+) ¹¹	?12		89		31				
Tiryns ¹³	484		2	56	1	64	35	82	91	?
Mycenae ¹⁴	476(+)		3	81	36	78	8	84	19	?
Tylissos	1			1						
Ayia Pelagia	1			1						
Midea	2(+?)		?	2		?				
Nichoria	1			1		,				
Menelaion	52(+)				35					
Dimini	18(+?)				18					
Korakou	17			1?	12					
Thebes	10					9	1	1?		
Mitrou	3(+?)					1				
Knossos	1(+)					1				
Aigeira	34(+)	"F	Pre-Myc":1	1		3	4	1		
Lefkandi	11(+?)				5		3	1	2	
Asine	4							4		

⁹ The information provided in the table come from the main publication of each site, these are mentioned in: 1.1.1. The quantities of vessels and fragments are the one mentioned in the publications available, consequently there are only indicative of the minimum amount found. Some sites where HBW has been found are not included in this table because the dating isn't precise enough.

¹⁰ The total per site corresponds to the HBW specimens so far published and includes HBW without a precise context.

11 The quantity indicated includes all specimens published, even the ones without a precise context.

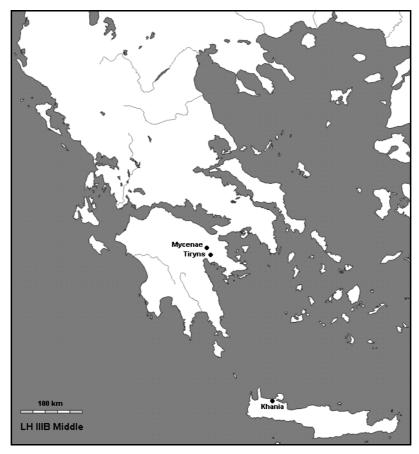
The question mark means that there is more material which isn't published yet.

¹² Question marks alone indicate that there might still be unpublished material and future publications might change the picture.

13 When the dating of a specimen was assigned to two periods, the earliest one was chosen.

The data provided here corresponds to the information collected for the preliminary study presented in: Chapter 4 and [Figure 4.8b].

Figure 1.5: Maps of Mycenaean sites with HBW in LH IIIB



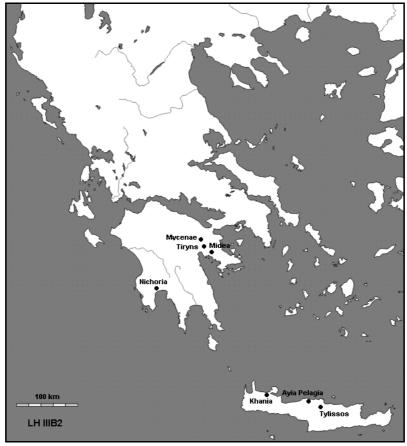
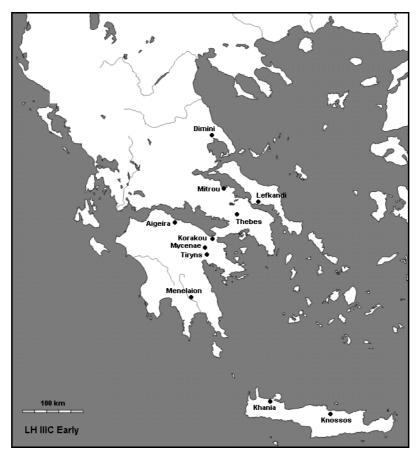


Figure 1.6: Maps of Mycenaean sites with HBW in LH IIIC





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Chapter 2:

Typology of shapes and comparative analysis

Figure 2.1: Typological tables of HBW shapes

Type 1: Car	Type 1: Carinated vessels				
T1 Category 1: Vessel with stro	T1 Category 1: Vessel with strong carination and everted profile				
Lefkandi ¹ (8/13)	Aigeira ² (2003a: 8.5)				
"Carinated cup" D (rim) 16 cm, H 7.5 cm LH IIIC phase 1a	"Carinated bowl" D (rim) 24-25 cm "Pre-Mycenaean level"				
Tiryns ³ (309)	Dimini ⁴ (13e)				
"Tasse - knickwandschale" D (rim) 18 cm LH IIIC Early	Not mentioned LH IIIC Early				
(published illustration was wrong)					
Korakou ⁵ (13)	Mycenae ⁶				
"Open vase, carinated body" D (carination) 15 cm LH IIIC Advanced?	GMBW'68/240 HBW1 D (rim) 9 cm LH IIIB2				

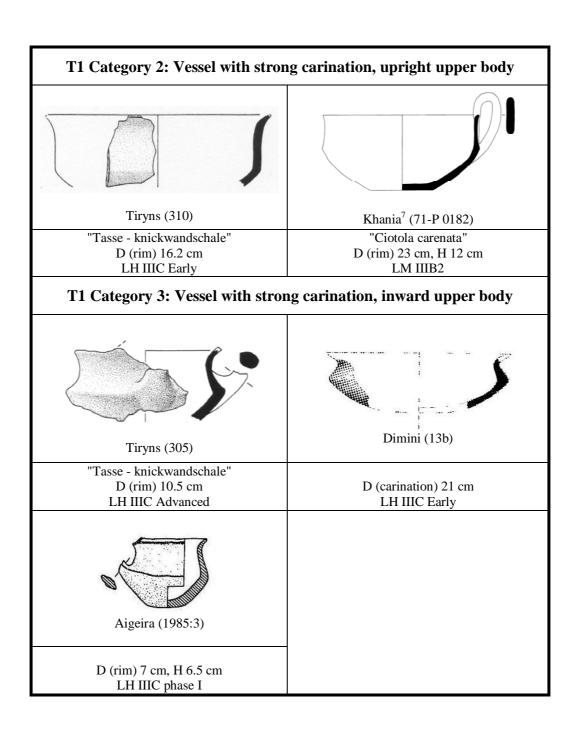
 $^{^1}$ All Lefkandi HBW drawings/photographs from: Evely et al. 2006. 2 HBW drawings/photographs from Aigeira are either from: Deger-Jalkotzy 1977; 2003a; or Deger-Jalkotzy, Alram-Stern 1985.

³ All Tiryns HBW drawings from: Kilian 2007.

⁴ All Dimini HBW drawings from: Adrimi-Sismani 2006.

⁵ All Korakou HBW drawings from: Rutter 1975.

⁶ References to HBW drawings from Mycenae: *4.3*.



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 $^{^7}$ All Khania HBW drawings/photographs from: Hallager, Hallager 2000, for LM IIIC; Hallager, Hallager 2003, for LM IIIB2.

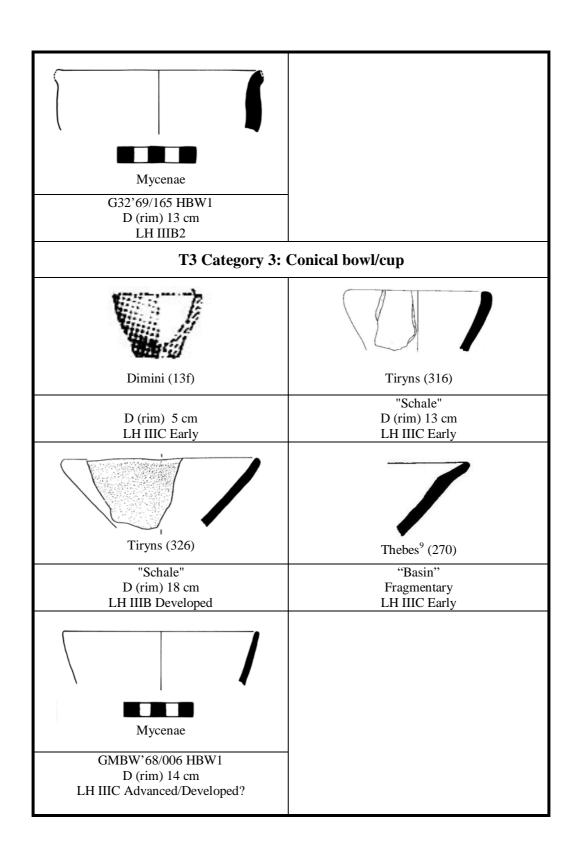
T1 Category 4: Vessel with gentle rounded carination and high-swung handle					
Korakou (7)	Khania (80-P 0427+80-P 0346)				
"Kantharos" D (rim) 17 cm	"Ciotola carenata" Fragmentary				
LH IIIC Early	LM IIIC				
T1 Category 5: Vessel with gentle rounded carination and knob(s)/lug(s)					
Khania (84-P 1345)					
"Ciotola carenata" D (rim) 20 cm LM IIIB2					

Type 2: Cups					
T2 Category 1: Convex-sided cup with vertical handle					
Lefkandi (65/P107)	Menelaion ⁸ (21)				
"Italian cup" D (rim) 10.5 cm, H 10.5 cm LH IIIC phase 1b	"Mug/beaker" Not mentioned LH IIIB2-IIIC Early				
	Ainsin (1077-12)				
Tiryns (299) "Becher" D (rim) 12 cm, H 13 cm	Aigeira (1977:12) "Cup with ring handle" D (rim) 10.5 cm, H 8.5 cm				
LH IIIB Middle T2 Cotogowy 2: Collo	Not mentioned				
12 Category 2: Colla	red cup (with handle?)				
Tiryns (296)					
"Becher" D (rim) 12 cm Not mentioned					

⁸ All Menelaion HBW drawings from: Catling 1981, except mentioned otherwise.

Type 3: Bowls					
T3 Category 1: Round	T3 Category 1: Rounded bowl (D rim ≤ 20 cm)				
Menelaion (31)	Khania (71-P 0416)				
"Basin" "Not estimated" LH IIIB2	"Scodella" D (rim) 20 cm Post-Minoan strata				
Aigeira (2003a: 8.2) "Large bowl" Fragmentary "Pre-Mycenaean level"	Tiryns (239) "Deckel" D (rim) 20 cm LH IIIC Developed/Advanced				
Mycenae					
G23'64/198 HBW1 Fragmentary LH IIIC Developed/Advanced					

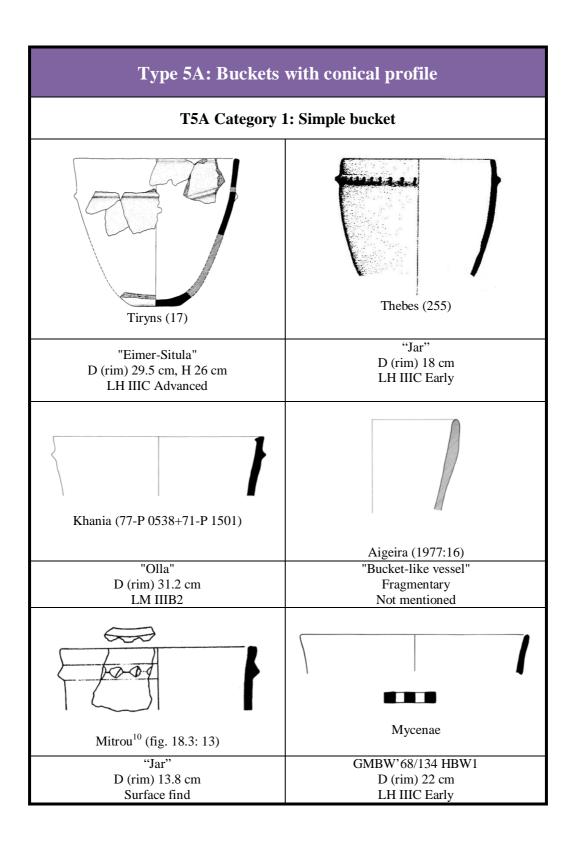
Dece	orated
Aigeira (2003a: 7.6)	Menelaion (26)
"Semi-globular cup" D (rim) 10 cm, H 4.5 cm "Pre-Mycenaean level"	"Bowl" Fragmentary LH IIIB2
Dimini (11g) Not mentioned LH IIIC Early	_
T3 Category 2: Rounded bo	owl/cup with vertical handle(s)
Tiryns (314)	Korakov (11)
	Korakou (11)
"Konische Tasse mit Schlaufenhenkel" D (rim) 21 cm LH IIIC Late	"Cup" Fragmentary LH IIIC Early



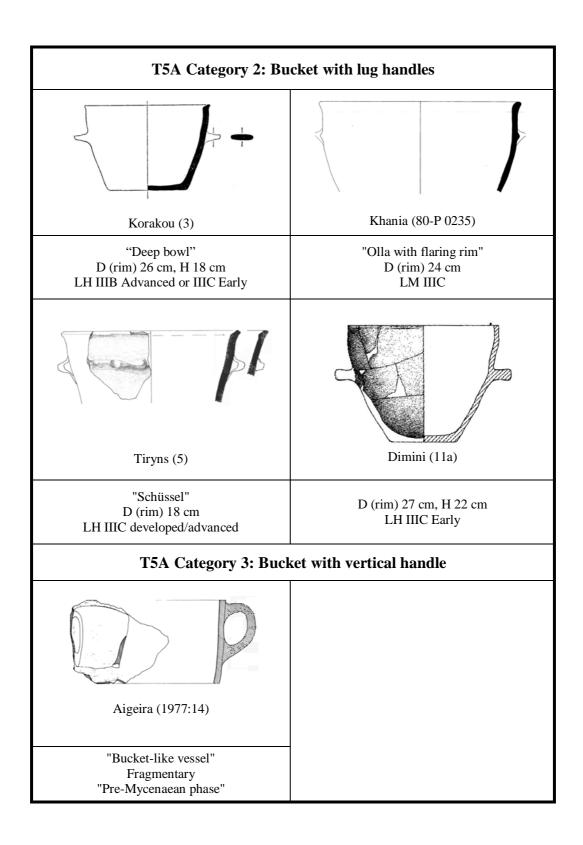
 $^{^{\}rm 9}$ All Thebes HBW drawings from: Andrikou et al. 2006.

T3 Category 4: Vessel on foot, kylix				
-1-0				
Mitrou (fig. 18.3.14)	Mycenae			
"Kylix" Fragmentary LH IIIC? (mixed context)	G23'68/038 HBW1 Fragmentary LH IIIC Early			
Tiryns (327)				
"Schale"				
D (rim) 15 cm LH IIIC Advanced				

Type 4	: Basins				
T4 Category 1: Basin					
Aigeira (2003a: 9.3) "Large bowl" D (rim) 30-32 cm LH IIIC phase I b Mycenae GMB'68/060 HBW1	Tiryns (322) "Schale" D (rim) 26.5 cm LH IIIB Developed				
D (rim) 27 cm LH IIIC Advanced/Developed	Basin with handles				
Korakou (4)	Dimini (13c)				
"Basin" D (rim) 30 cm LH IIIC Early	D (rim) 32 cm LH IIIC Early				
T4 Category 3: Basin w	rith strong incurving rim				
Dimini (13a)					
D (rim) 26 cm, H 10 cm LH IIIC Early					



 $^{^{\}rm 10}$ All Mitrou HBW drawings from: Lis 2009.

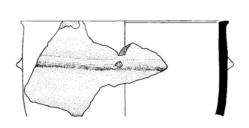


Type 5E	B : Situla
Tiryns (18)	
"Eimer - Situla"	"Vaso situliforme"
D (rim) 25.5 cm LH IIIC Late	D (rim) 24 cm LM IIIC
Menelaion ¹¹ (A 268)	Mycenae
"Large bowl or basin" Fragment length: 20 cm LH IIIB2	G23'64/221 HBW1 Fragmentary LH IIIC Early

¹¹ From: Catling 2009.

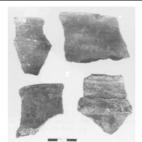
Type 5C: Buckets with straight profile

T5C Category 1: Bucket with straight profile



Tiryns (118)

"Steiler, kaum bauchiger Gefässkörper mit abgesetztem Rand" D (rim) 22.8 cm LH IIIB Final

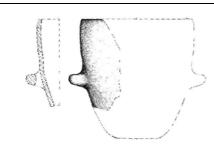


(only illustration available)

Lefkandi (pl. 49.4)

"Bucket" Fragmentary Phase 1b

T5C Category 2: Bucket with straight profile and horn/knobs handles

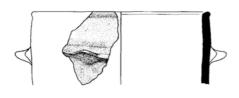


Dimini (11b)



Menelaion¹² (A 265)

Not mentioned LH IIIC Early "Jar" Not mentioned LH IIIB2-IIIC Early

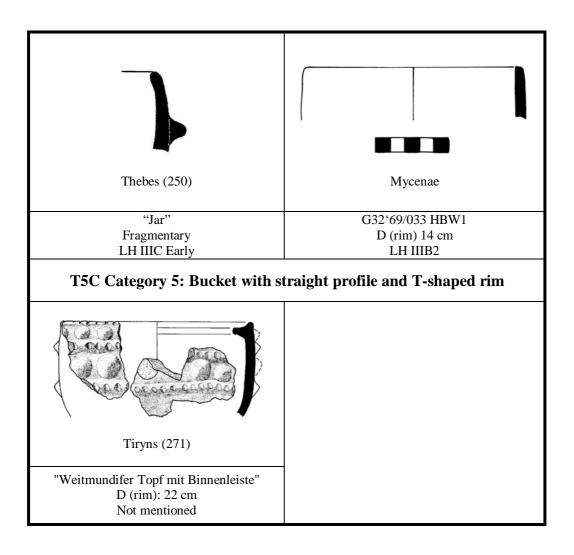


Tiryns (119)

"Steiler, kaum bauchiger Gefässkörper mit abgesetztem Rand" D (rim) 20.5 cm Not mentioned

¹² From: Catling 2009.

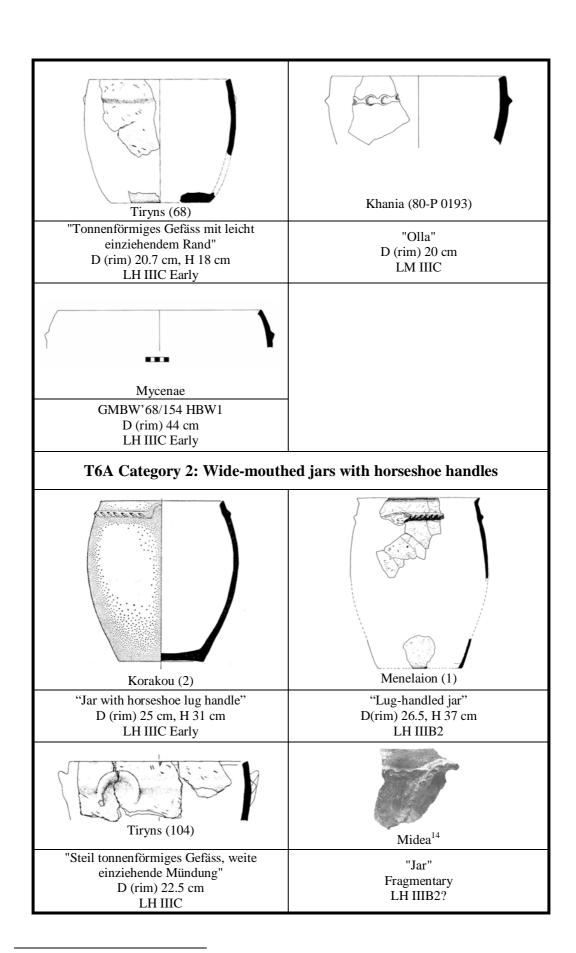
T5C Category 3: Bucket with straig	ght profile and horizontal handles (?)
Khania (73-P 1094)	
"Olla with horizontal handles" D (rim) 27.6 cm LM IIIB2	
T5C Category 4: Medium	bucket with straight profile
Aigeira (1985:1)	Menelaion (25)
D (rim) 17 cm, H 14 cm LH IIIC phase I	"Bowl" D (rim) 20 cm LH IIIB2
Manalaion (24)	000
Menelaion (24)	Aigeira (1977:10)
"Bowl" Not mentioned LH IIIB2	"Small jar" D (base) 14.5 cm LH IIIC phase I



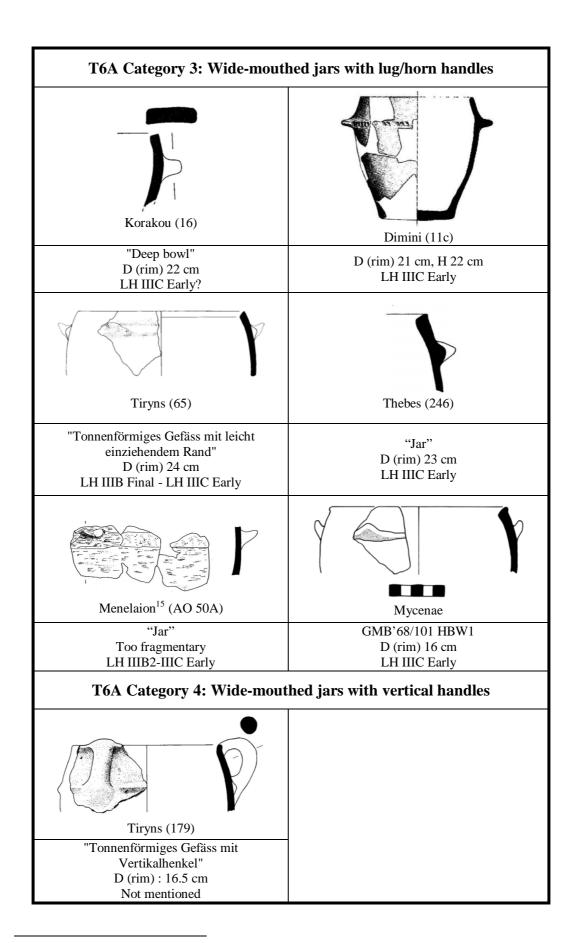
Type 6A: Wide-mouthed deep ovoid jars **T6A Category 1: Wide-mouthed jars** Aigeira (2003a: 7.1) Thebes (383) "Jar" "Large container with incurving rim" D (rim) 17 cm D (rim) 32 cm LH IIIC Middle? "Pre-Mycenaean level" Korakou (9) Tiryns (26) "Hochbauchiges Gefäss mit stark "Jar with lug handle" D (rim) 35 cm einziehendem Rand" D (rim) 21.6 cm, H 29.7 cm LH IIIC Early LH IIIC Early Menelaion¹³ (PE 260) Lefkandi (69/P73) "Jar" "Large open jar" D(rim) 34 cm, H 31 cm Too fragmentary LH IIIC phase 1a LH IIIB2-IIIC Early

27

¹³ From: Catling 2009.



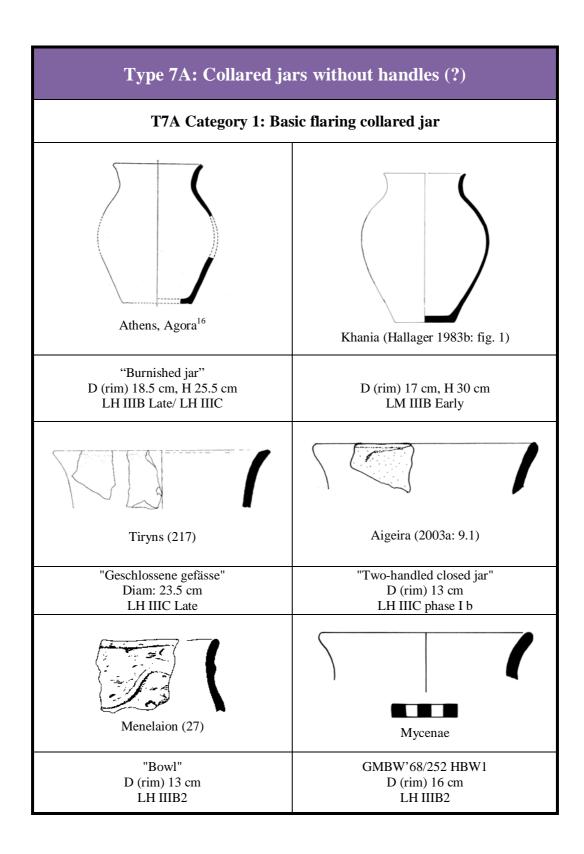
 $^{^{\}rm 14}$ All Midea HBW photographs from: Demakopoulou et al. 2003.



¹⁵ From: Catling 2009.

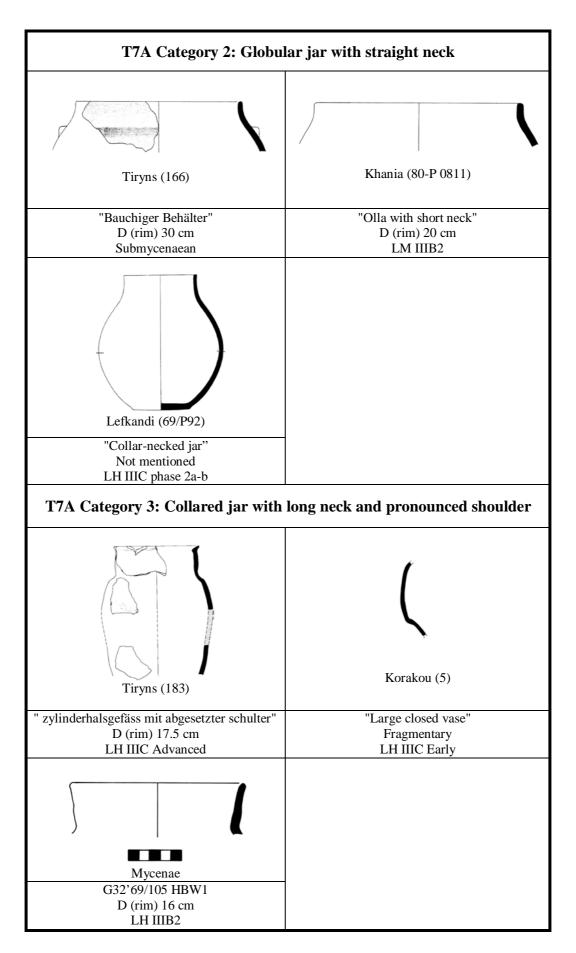
Type 6A Category 5: Wide-mouthed globular jars				
Menelaion (3)	Tiryns (127)			
"Lug-handled jar" Fragmentary LH IIIB2	"Gefasskorper abgesetztem Rand" D (mid-body) 18.5 cm LH IIIC Early/Advanced			

Type 6B: Hole-mouthed jars	
Korakou (1)	Tiryns (276)
"Hole-mouthed jar" D (rim) 13 cm, H 15 cm LH IIIC Early	"Gefäss mit extrem einziehendem Rand" D (rim) 14 cm, D (at shoulder) 18.5 cm LH IIIC Developed/Advanced
Tiryns (277)	
"Gefäss mit extrem einziehendem Rand" D (rim) 9 cm, D (at shoulder) 13.5 cm LH IIIC Developed/Advanced	



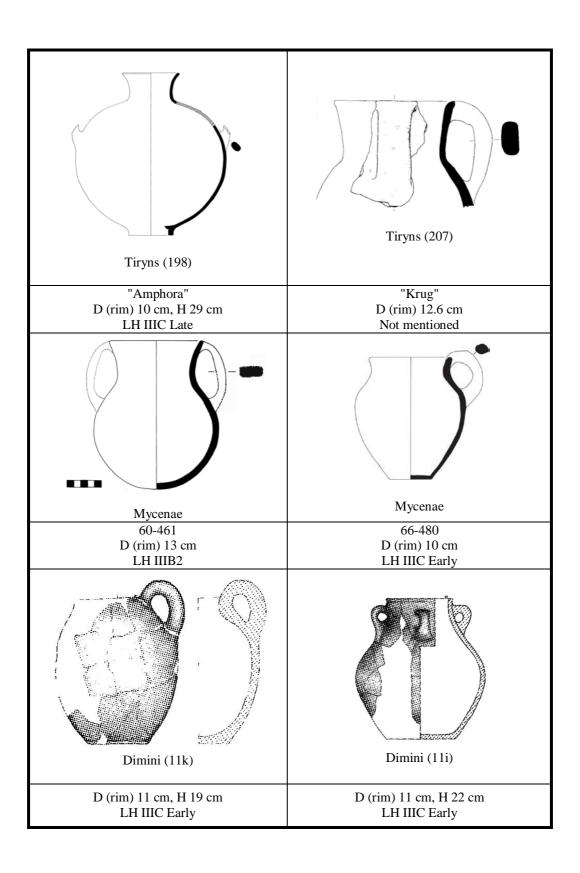
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¹⁶ From: Rutter 1975.

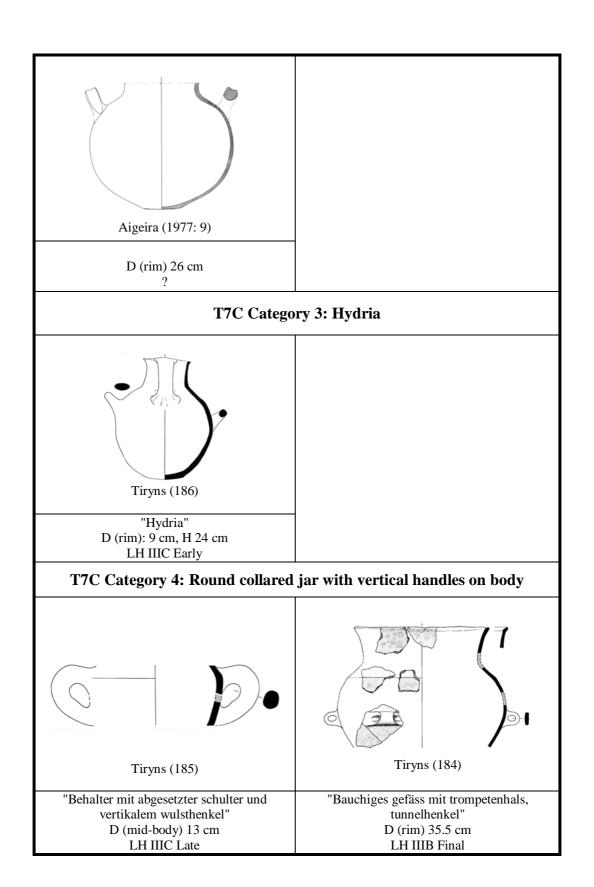


Type 7B: Collared jars with vertical handle(s) from rim to shoulder	
	March 17 (AQ 52)
Tiryns (200)	Menelaion ¹⁷ (AO 52)
"Kochtopf" D (rim) 13.5 cm LH IIIC Late	"Jar" Too fragmentary LH IIIB2-IIIC Early
Aigeira (2003a: 3.1)	Tiryns (209)
"Jug" Not mentioned LH IIIC phase I	"Krug" D (rim) 12 cm LH IIIC Late
Lefkandi (69/P17)	Thebes (343)
"Jar" Fragmentary LH IIIC phase 3	"wide-mouthed jug" D (rim) 17 cm LH IIIC Early

¹⁷ From: Catling 2009.



Type 7C: Collared jars with other types of handles					
T7C Category 1: Collared jars with lug handle(s)					
Tiryns (176)	Thebes (341)				
"Bauchiger Behälter" D (rim) 17 cm LH IIIC Early	"Jar" D (rim) 19 cm LH IIIC Early				
T7C Category 2: Collared jars with	T7C Category 2: Collared jars with two horizontal handles on shoulder				
Tiryns (187)	Aigeira (2003a: 8.6)				
"Amphora" D (rim) 12.5 cm, H 16 cm LH IIIB Developed	D (rim) 14-15 cm LH IIIC phase II				



Type 8: Utensils							
T8 Category 1: Lid							
Tiryns (251)	Tiryns (235)						
"Deckel" Length 22.5 cm LH IIIC Early/Developed	"Deckel" Length 12 cm LH IIIC Early						
Tiryns (228)	Tiryns (232)						
"Deckel" Length 15.5 cm LH IIIC Early	"Deckel" Fragmentary LH IIIC Advanced						
	Tiryns (227)						
Tiryns (230) "Deckel" Fragmentary LH IIIB Developed	"Deckel" Length 12.5 cm LH IIIC Early						
Mycenae	Mycenae						
G32'69/103 HBW1 D (rim) 20 cm LH IIIB2	G32'69/107 HBW1 D (rim) 14 cm LH IIIB2						

T8 Category 2: Stands								
	Dimini (13h)							
Menelaion (34) "Part of model of stand ?" Fragmentary LH IIIB2	Length 19 cm, H 17 cm LH IIIC Early							
Tiryns (260)	Tiryns (266)							
"Ständerfuss" Length 30 cm LH IIIC Advanced	" Ständerherd " Length 23.5 cm LH IIIB Final							
Mycenae	Mycenae							
GMBW'68/051 HBW1 Fragmentary LH IIIC Advanced/Developed?	GMBW'68/133 HBW2 D (rim) 20 cm LH IIIC Early							

T8 Category 3: Dipper/ladle?					
Tiryns (312)	Mitrou (fig. 18.3.15)				
"Henkeltasse mit bauchigem korper" D (rim) 11.5 cm LH IIIC Late	"cup with high-swung handle" Fragmentary LH IIIC Early?				
Mycenae					
G32'69/165 HBW1 D (rim) 13 cm LH IIIB2					

T8 Category **4:** Spouted convex-sided cup with vertical handle Aigeira (2003a: 6) "Spouted cup" D (rim) 9 cm LH IIIC phase I b **T8 Category 5: Pans** Tiryns (300) "Pfanne" Length 18 cm LH IIIC Advanced T8 Category 6: Spoons (?) 0 1 2 3 4 5 Aigeira (2003a: 10) "Spoon-handle (?) with bird head" Fragment length 10.5 cm

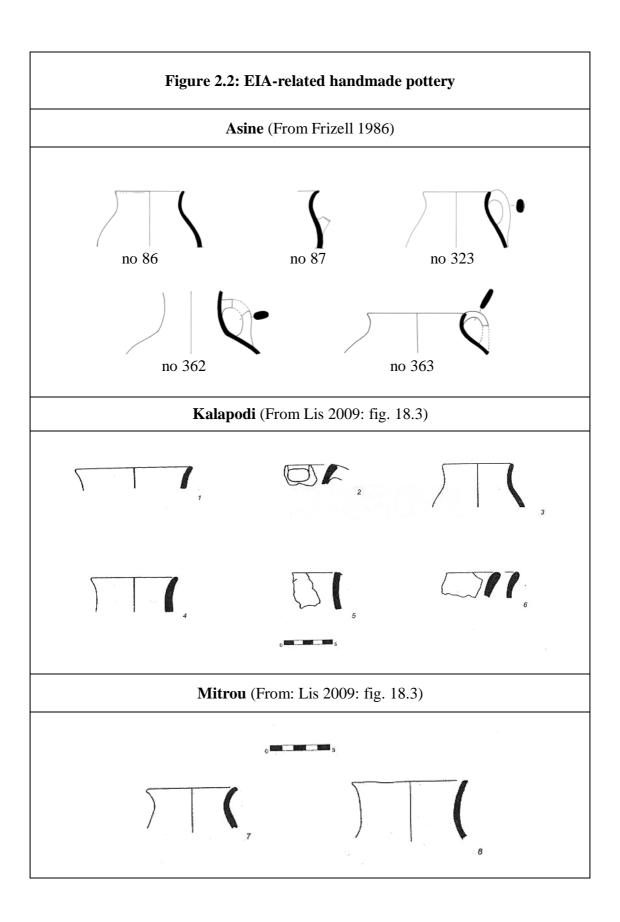


Figure 2.3a: HBW decorations: applied cordon						
Straight horizontal cordon						
Plain	Finger impressions					
Menelaion (25)	Tiryns (39)					
Dots	Oblique slashes					
Construction of the Constr						
Tiryns (67)	Korakou (2)					
Rope-like	Piecrust					
Tiryns (98)	Tiryns (55a)					
Vertical and horizontal cordons	Wavy cordon on body					
Tiryns (278)	Korakou (1)					

Figure 2.3b: HBW decorat	ions: features combinations				
Multiple straight horizontal cordons	Incised rim, knobs and applied cordons				
00000					
Aigeira (2003: fig. 7.3)	Tiryns (271)				
Oblique slashes and applied cordon	Plain wavy cordon and knobs				
Capital Control of the Control of th					
Menelaion (6)	Tiryns (291)				

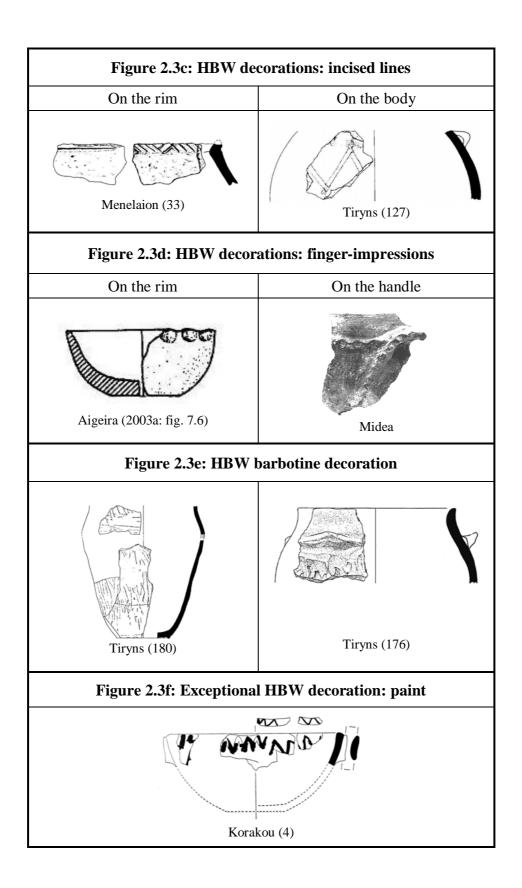


Figure 2.4: HBW lug variations						
Horseshoe handle	Horseshoe decoration?					
Tiryns (104)	Tiryns (144)					
Single horn	Double horn					
Tiryns (65)	Menelaion (11)					
Short knob	Square knob					
Tiryns (5)	Tiryns (34)					

Figure 2.5: HBW carinated vessels with handle decorations						
Horn decoration	Axe-shape decoration					
Dimini (13d)	Tiryns (311)					
D (rim) 11 cm LH IIIC Early	"Tasse - knickwandschale" Fragmentary LH IIIC Early					
Animal protor	me? decoration					
	Lefkandi (pl. 49.2)					
Khania (80-P 0062) "Handle of ciotola carenata" Fragmentary LM IIIC	"Cup with handle, possible animal protome" Fragmentary LH IIIC phase 1a					
Rectangular pro	tuberance on rim					
Dimini (13c)						
D (rim) 32 cm LH IIIC Early						

Figure 2.6: Table of shape types quantitative distribution in Aegean sites

Sites	Tiryns	Korakou	Menelaion	Lefkandi	Aigeira	Thebes	Dimini	Khania	Mycenae
Carinated vessels: T1	11	2	1?	2	2	0	4	4 (+12?)	6?18
T1 C1	5	1		2	1		2	1	4
T1 C2	2							1	
T1 C3	3				1		1		
T1 C4	1	1	1?					1	1?
T1 C5								1	
Cups: T2	3	0	2	2	1	1	0	0	3?
T2 C1	1		2	2	1	1			
T2 C2	2								
Bowls: T3	32	1	7	0	2	1	2	3	8?
T3 C1	10		6		2		1	3	5
T3 C2	1	1							
T3 C3	20		1			1	1		1
T3 C4	1								1
Basins: T4	6	1	0	1	1	0	1	0	1
T4 C1	5				1				1
T4 C2	1	1		1					
T4 C3							1		
Buckets: T5	40	2	5	2	5	4	3	10	7
T5A	19	1			3	3	2	7	1
T5A C1	13				2	3?		3	1
T5A C2	6	1					2	4	
T5A C3					1				
T5B	6		1					2	1?
T5C	15	1	4	2	2	1	1	1	5
T5C C1	5			2					
T5C C2	1	1	1				1		
T5C C3								1	
T5C C4	8		3		2	1			5
T5C C5	1								

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¹⁸ The total quantity for each type includes specimens which couldn't be classified into categories, in general, due to their small size.

Sites	Tiryns	Korakou	Menelaion	Lefkandi	Aigeira	Thebes	Dimini	Khania	Mycenae
Wide-mouthed jars: T6	130	8	16	1	5	2	4	2	10
T6A	105	7	16	1	5	2	4	2	10
T6A C1	26	1	11	1	5	1		2	4
T6A C2	1	3	1						
T6A C3	60	3	4			1	4		4
T6A C4	2								
T6A C5	16								
T6B	25	1							
Collared jars: T7	51	2	5	2	7	2	2	3	26
T7A	21	2	4	1	3			3	9
T7A C1	5	1	4		3			1	8
T7A C2	12			1				2	
T7A C3	4	1							1
Т7В	16		1?	1	2	1	2		10
T7C	14				2	1			
T7C C1	4	1				1			
T7C C2	6				2				
T7C C3	1								
T7C C4	2								
Utensils: T8	20	0	1	0	2	0	2	0	13?
T8 C1	9								6?
T8 C2	9		1				2?		4?
T8 C3	1								1?
T8 C4					1				
T8 C5	1								
T8 C6					1				
Total	293	16	37	10	25	10	18	34	74
Unidentified shapes	192	1	14	0	?	0	0	95	?

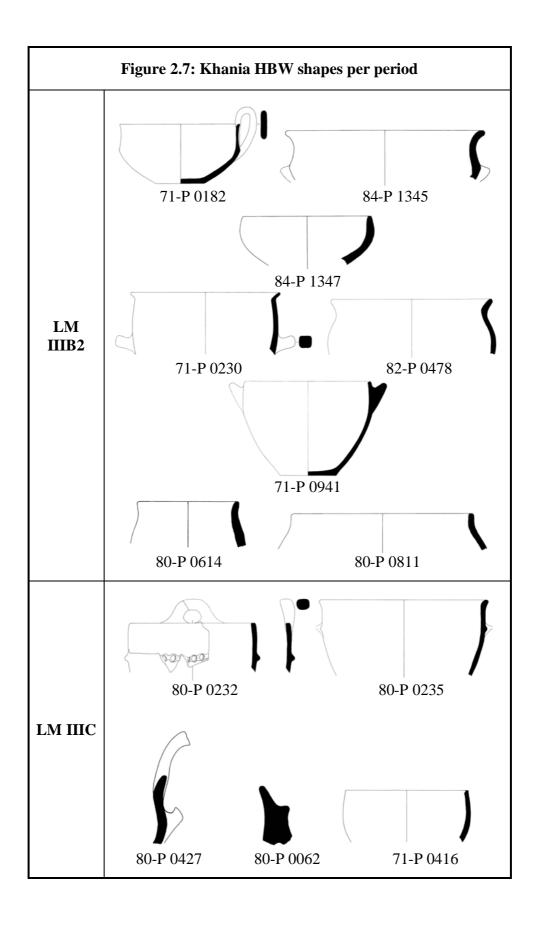
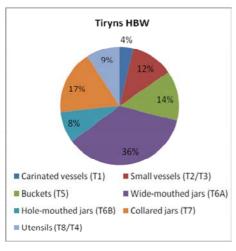
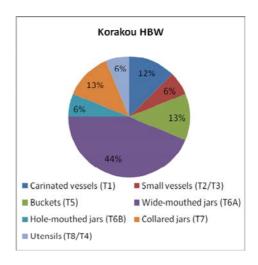
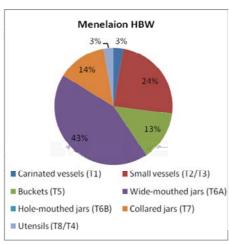
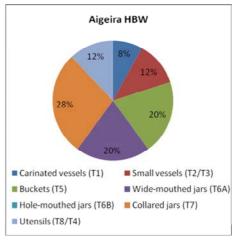


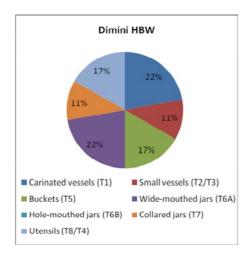
Figure 2.8: Charts of proportion of shape types per site

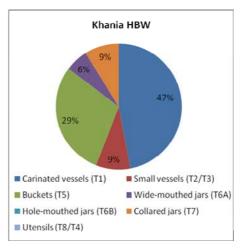












(Based on the count mentioned in [Figure 2.6]).

Figure 2.9: HBW influen	Figure 2.9: HBW influenced by Mycenaean ware?						
HBW	Mycenaean ware						
Type 7C C3	Hydriae FS 128						
Tiryns (186)	Mycenae (WBM 10: 68-1429)						
"Hydria" D (rim) 9 cm, H 24 cm LH IIIC Early	"Hydria" D (rim) 11.8 cm, H 31 cm LH IIIB2 (phase VIII)						
Type 7B	Amphorae FS 69						
Tiryns (198)	Mycenae (Mountjoy 1986: fig. 117.1)						
"Amphora" D (rim) 10 cm, H 29 cm LH IIIC Late	"Amphora" D (rim) 12.6 cm, H 35 cm LH IIIB1						
Type 7C C2	Amphoriskoi FS 59						
Aigeira (2003a: 8.6)	Lefkandi ¹⁹ (fig. 2.31: 6)						
Not mentioned D (rim) 14-15 cm LH IIIC phase II	"Amphoriskos" D (rim) 7.8 cm, H 11.7 cm LH IIIC Phase 2a						

¹⁹ All Lefkandi Mycenaean pottery drawings from: Evely et al. 2006.

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Type 7B	Cooking pots FS 65, FS 66				
Tiryns (200)	Lefkandi (fig. 2.34: 4)				
"Kochtopf" D (rim) 13.5 cm LH IIIC Late	"Jug or two-handled cooking pot" D (rim) 13.5 cm, H 30 cm LH IIIC Phase 2b				
Aigeira (1977: 13)	Lefkandi (fig. 2.33: 3)				
Diam: 18 cm ?	"Jug or one-handled cooking pot" D (rim) 11.7 cm, H 16.2 cm LH IIIC Phase 1b				
Type 5A C2	Tubs				
Tiryns (259a) "Wanne" Fragmentary LH IIIC Early					
Korakou (3)	Lefkandi (fig. 2.36: 4)				
"Deep bowl" D (rim) 26 cm, H 18 cm LH IIIB Advanced or IIIC Early	"Tub" D (rim) 49.2 cm, H 31.2 cm LH IIIC Phase 1b				

Type 7B	Jugs FS 110
Tiryns (207)	Mycenae (Wardle 1969: fig. 3.11)
"Krug" D (rim) 12.6 cm Not mentioned	"Globular jug" D (rim) 18.4 cm, H 23 cm LH IIIB1
Type 8 C1	Lids FS 334
Tiryns (239)	Perati (Mountjoy 1986: fig. 199.1)
"Deckel" Length 19.8 cm LH IIIC Developed/Advanced	"Lid" Length 8.8 cm, H 3.3 LH IIIC Early

Type 6B	Alabastron FS 98
Tiryns (276)	Eutresis (Mountjoy 1986: fig. 173.2)
"Gefäss mit extrem einziehendem Rand" D (rim) 14 cm, D (shoulder) 18.5 cm LH IIIC Developed/Advanced	"Alabastron" D (rim) 13.2 cm, H 15.2 cm LH IIIC Early
Type 3 C3	Kylix FS 274
Tiryns (326)	Mycenae (Wardle 1969: fig. 10:105)
"Schale" D (rim) 18 cm LH IIIB Developed	"Conical kylix" D (rim) 16 cm, H 13.9 cm LH IIIB1
Type 8 C3	Scoops/Ladles
Tiryns (312) "Henkeltasse mit bauchigem korper" D (rim) 11.5 cm LH IIIC Late	Lefkandi (fig. 2.32: 4) "Scoop" D (rim) 6.9 cm, H 5.1 cm LH IIIC Phase 1b

Figure 2.10: Mycenaean ware influenced by HBW shapes?	
HBW	Mycenaean ware
Carinate	ed vessel?
Lefkandi (8/13)	Lefkandi (fig. 2.7: 3)
"Carinated cup" D (rim) 16 cm, H 7.5 cm LH IIIC phase 1a	"Carinated cup" D (rim) 12 cm, H 5.7 cm LH IIIC Phase 2a
Angula	r krater?
Menelaion (33)	Mycenae (Mountjoy 1986: fig 224.1)
"Small pithos" D (rim) 33 cm LH IIIB2	"Carinated krater" D (rim) 26 cm LH IIIC Middle
Shallov	v trays?
	Lefkandi (fig. 2.26: 1)
no. 1-2: Tiryns (266, 261) no. 3: Menelaion (34)	"Tray" D (rim) 33 cm LH IIIC Phase 2b/3

Figure 2.11: Mycenaean ware influenced by HBW decorations?	
HBW	Mycenaean ware
Bull's hea	d finals?
	Lefkandi (fig. 2.16: 12)
no. 1: Tiryns (311) no. 2: Khania (80-P 0062) no. 3: Dimini (13d)	"Carinated vessel" Fragmentary LH IIIC Phase 2a
Applied plastic cordon with incisions?	
Korakou (2, detail)	Corinth (Rutter 1979: 6, detail)
"Jar with horseshoe lug handle" D (rim) 25 cm, H 31 cm LH IIIC Early	"Krater" ? LH IIIC Phase 4

Painted imitation of impressed decorations? ? (MDP: fig. 220.6, detail) Korakou²⁰ (7) "Kantharos" "Carinated cup" D (rim) 17 cm LH IIIC Early Fragmentary LH IIIC Middle Asine (Mountjoy 1986: fig. 220.1, detail) no. 1: Aigeira (2003a: 7.6) no. 2: Tiryns (271) "Carinated cup" D (rim) 15.4 cm, H 9.2 cm LH IIIC Middle

 $^{^{20}}$ Photograph taken by the author.

Figure 2.12: Typological comparisons between Aegean, Near Eastern and Cypriot HBW		
Aegean HBW	Cypriot HBW ²¹	Near East HBW
Tiryns (239) D (rim) 20 cm	Kition (fig. 18.2) D (rim) 16 cm	Badre fig. 24b D (rim) 15.2 cm
Tiryns (17) D (rim) 29.5, H 26 cm	Sinda (fig. 19.5) D (rim) 14.8 cm	Badre 2003: fig. 9.3 D (rim)14.8 cm
T5C C1 Tiryns (118) D (rim) 22.8 cm	Enkomi (fig. 19.4) D (rim) 21 cm	Badre 2003: fig. 7.10 D (rim) 21.3 cm

²¹ All Cypriot HBW drawings from: Pilides 1994.

Aegean HBW	Cypriot HBW	Near East HBW
Dimini (11c) D (rim) 21 cm, H 22 cm	Maa-Palaeokastro (fig. 20.1) D (rim) 16 cm	Badre 2003: fig. 6.2 D (rim) 36 cm
Aigeira (2003a: 8.6) D (rim) 14-15 cm	Hala S. Tekke (fig. 20.2) D (rim) 9.6 cm	Badre 2003: fig. 6.8 D (rim) 12 cm, H 25.2 cm

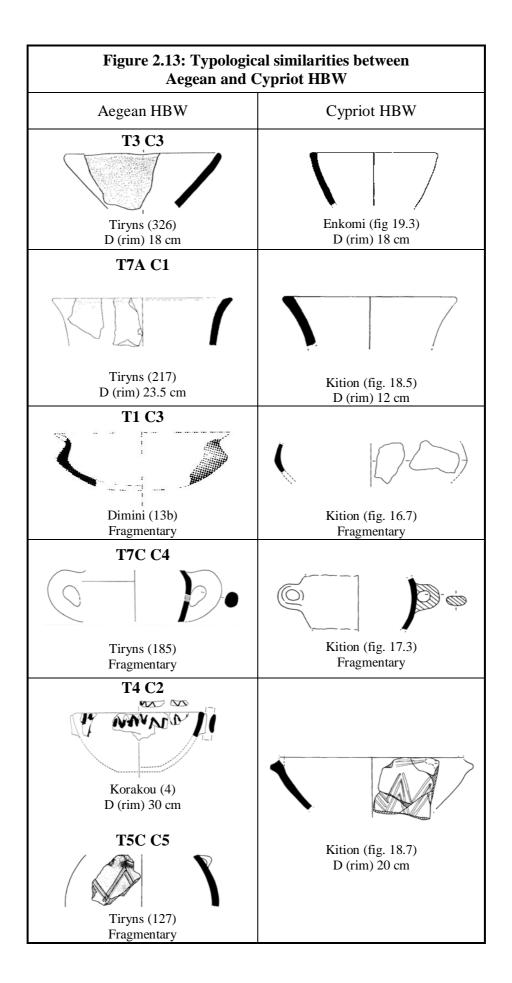
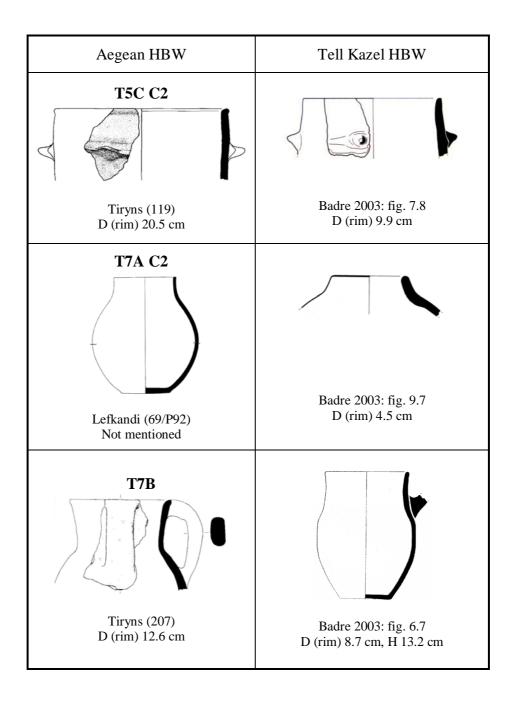


Figure 2.14: Typological similarities between Aegean and Near Eastern HBW	
Aegean HBW	Tell Kazel HBW
T1 C1	
	Q DI
Lefkandi (8/13) D (rim) 16 cm, H 7.5 cm	Badre 2003: fig. 7.11 D (rim) 18.6 cm
T2 C1	
	Badre 2003: fig. 9.5
Lefkandi (65/P107) D (rim) 10.5 cm, H 10.5 cm	D (rim) 9.6 cm
T5A C2	\
Dimini (11a) D (rim) 27 cm, H 22 cm	Badre 2003: fig. 6.5 D (rim) 28 cm



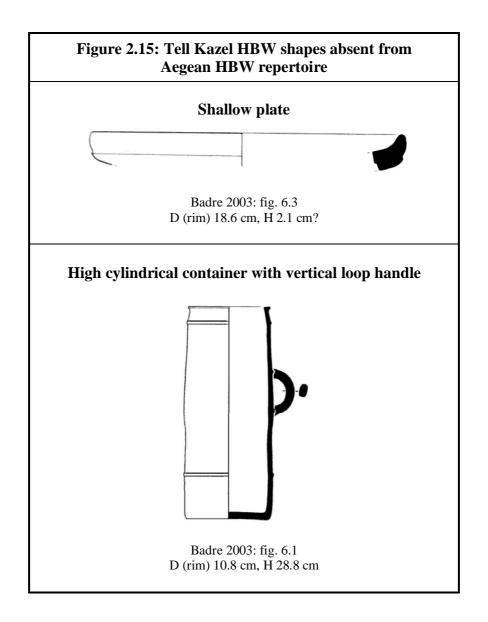
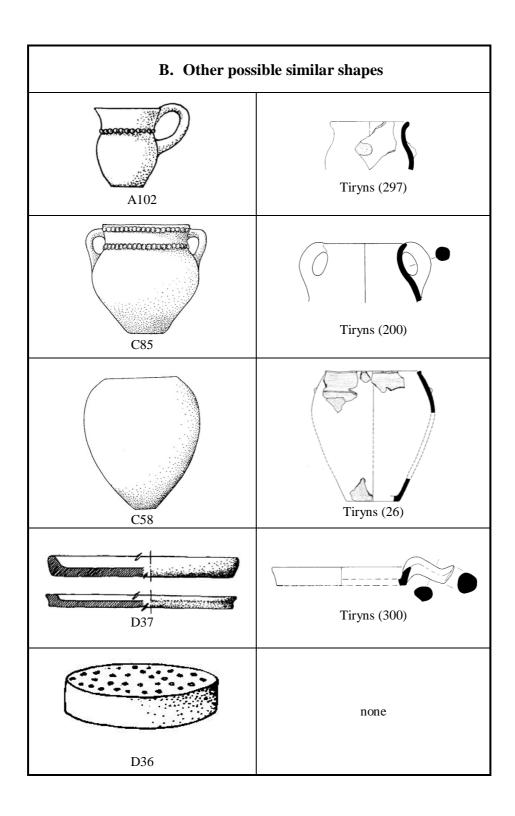


Figure 2.16: Typological comparisons between Trojan ''Barbarian ware'' ²² and Aegean HBW	
A. Similarities between Trojan "Barbarian ware" and Korakou HBW Group 1	
Trojan "Barbarian ware"	Korakou HBW
C86	no. 2
fig. 285: 18	no. 1
fig. 286: 3	CP 2922 ²³

²² Troy drawings after: Blegen et al. 1958. ²³ Photograph taken by the author.



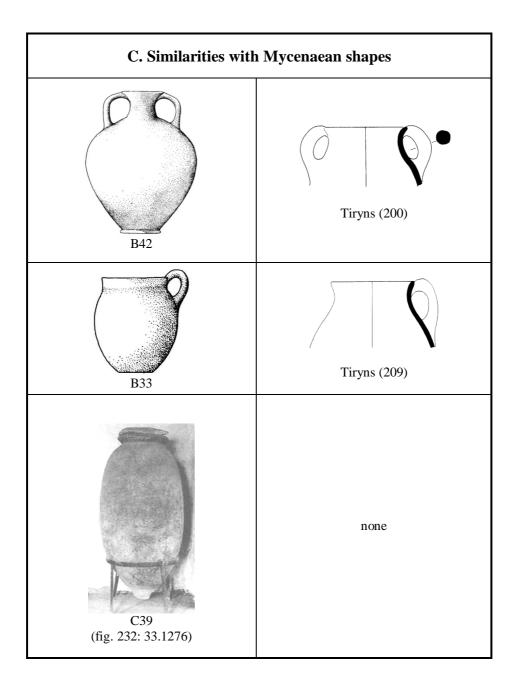


Figure 2.17: Typological comparisons between Trojan ''Knobbed ware'' ²⁴ and Aegean HBW	
A. Trojan "Knobbed ware" similarities with HBW	
Trojan "Knobbed ware" shapes	Korakou HBW Group 2
A107	no. 7
Trojan "Knobbed ware" shapes	Korakou HBW Group 3
	no. 4
A101	
	Tiryns (127)
Trojan "Knobbed ware" shapes	Korakou HBW Group 4
B45 C84	no. 5

²⁴ Troy drawings after: Blegen et al. 1958.

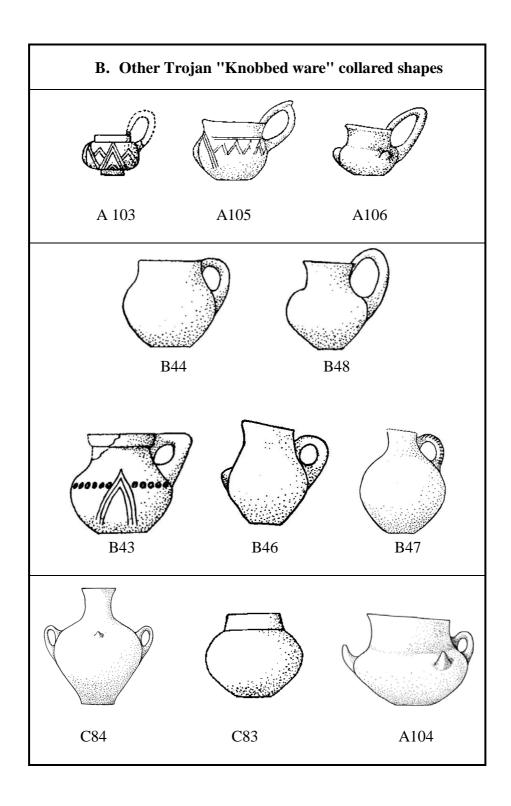
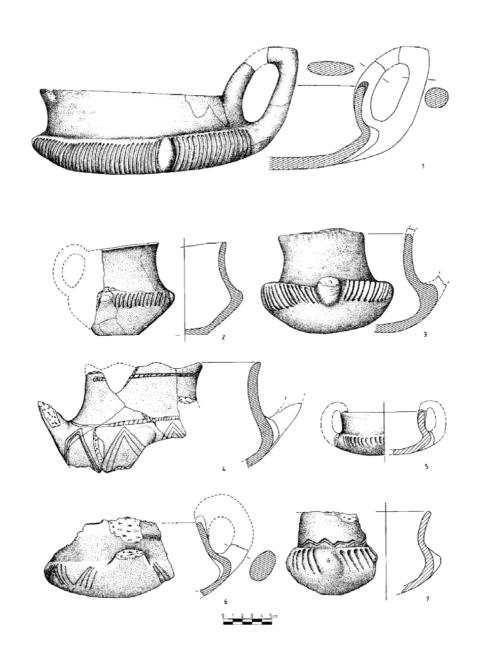


Figure 2.18: Other specimens of Trojan "Knobbed ware"



(After Koppenhöfer 1997: fig. 14)

Chapter 3: Fabric and manufacturing technology

Figure 3.1: Table of HBW fabric groupings from literature review

Sites	Fabric groups	Shapes
	Coarse fabric (Group 1) Not very well burnished Surface colouring mostly brown, frequently mottled	Large deep open shapes
Korakou (Rutter 1975: 23-28)	Medium coarse fabric (Group 2) Highly burnished Very lustrous grey or black surface	Small, relatively shallow open shapes
,	Very coarse fabric (Group 3) Grey fracture Thick wall	Large shapes
Fine fabric (Group 4) Red fracture		Large closed shape
Aigeira	Fine fabric	Carinated bowl
(Deger-Jalkotzy 1977: 22-23) Coarse fabric		Jar
Menelaion	Coarse fabric	No information
(Catling 1981)	Very coarse fabric	
Tiryns (Pilides 1994:	Fine fabric Well-compacted	No information
13-14)	Coarse fabric Crumbly	
	Fine fabric Very dark grey or black Highly burnished	Small open shapes
Khania (Pilides 1994: 28)	Coarse fabric Brown clay Surface: yellowish brown to light brown with greyish patches Mottled surface	Large open shapes

Figure 3.2: Grid of criteria for HBW analysis

Observations related to the fabric used by the potter:

Analysis of inclusions:

- _ Description
- _ frequency/quantity

Interpretation of inclusions:

- _ Attempt at identification
- _ Relation to properties of vessels?

Creation of fabric groups:

- Based on types of inclusions or fabric coarseness?
- _ Compare between specimens from the same site and between different sites

• Observations related to the firing conditions:

Analysis of colours of specimens:

- _ Assess the similarities/differences between surface and core
- _ Assess the presence of a margin

Presence of other features:

- Hardness of fabric
- Texture of fracture
- _ Deformation of surface (mottled, cracks...)

Creation of firing types:

- _ Based on presence/absence of core and variation in overall colour of specimens
- _ Compare between specimens from the same site and between different sites

• Observations relating to the quality of craftsmanship:

Quality of execution:

- Regularity of wall/rim/base, thickness of wall, presence of distortions
- _ Presence and quality of extra features (handles, decorations)

Quality of finish:

- _ Type of surface treatment
- _ Quality of surface treatment
- _ Variations within and between vessels

Creation of finishing quality types:

- _ Assess skill, care
- _ Vessels purpose (functional only, aesthetic only or both)

Figure 3.4: Summary table of previous scientific studies of HBW

Sites	Research Objectives	Techniques used	Sampling types and quantities	Conclusions
Mycenae	_ Origin	Thin section NAA AAS	_ HBW: unknown for Thin section, 2 for NAA and AAS For NAA: _ HBW: 2 _ Mycenaean ware (local and regional) _ MH pottery _ Post-Mycenaean pottery _ Local clays For AAS: _ HBW: 2 _ Mycenaean ware (local)	_ Local origin and possibly from another region than Argolid _ Different clay bed than local pottery
Thebes	NAA		_ HBW: 4 _ Mycenaean ware (local and regional)	_ Local origin
Khania		Thin section AAS	_ HBW: 7 _ Minoan ware (local)	_ Local origin
Menelaion	_ Origin _ Technology	Thin section	_ HBW: 8 _ Mycenaean ware (local)	_ Local origin _ Use of grog temper _ Different techniques than local pottery
Lefkandi	_ Origin _ Comparison with Italian ware	OES	_ HBW: 6 _ Mycenaean ware _ MH pottery _ PG pottery _ Italian pottery _ Troy VII pottery	_ Local (and possible foreign?) origin
Aigeira	_ Comparison with earlier wares _ Origin _ Technology	Thin section Heavy mineral	_ HBW: 16 _ Mycenaean ware _ Neolithic pottery _ Post-Mycenaean pottery _ Local clays	_ Local (and possible foreign) origin _ Different clay bed than local pottery _ Use of grog temper _ Different techniques than local pottery
Cyprus	_ Origin	NAA	_ HBW: 25 _ Cypriot ware (local)	_ Local (and possible foreign) origin _ Different clay bed than local pottery
Tell Kazel (Syria)	_ Origin _ Technology _ Comparison with Greek HBW	Thin section NAA	_ HBW: 11 _ Local cooking ware _ Grey ware (non- Trojan) _ Local clays	_ Local origin _ Use of temper (grog, organic) _ Different clay bed than local pottery

Figure 3.5: Table of Cyprus HBW fabric groups

	Cyprus fabric groupings (Pilic	des 1994)
	Fabric A	Fabric B
Fabric	Coarse, crumbly and porous	Thinner and harder
Surface colour	Never uniform (varies from reddish brown to brown, grey or black), sometimes lustrous	Darker, reduced to grey and with a black- burnished lustrous surface
Core colour	usually grey or black	grey to black
Texture	Variable but often micaceous, high number of inclusions, size varies but often large pieces of stone, also visible on surface	Similar to Fabric A
Burnishing	Always, at least on the exterior surface, achieved by small horizontal movements with a blunt tool or pebble leaving slightly lustrous surface	highly burnished to lustre
Surface aspect	Sometimes pitted, large matrices of burnt out inclusions visible, network of fine fire cracks	Similar to Fabric A
Shape	Large open or closed shapes	Smaller than for Fabric A

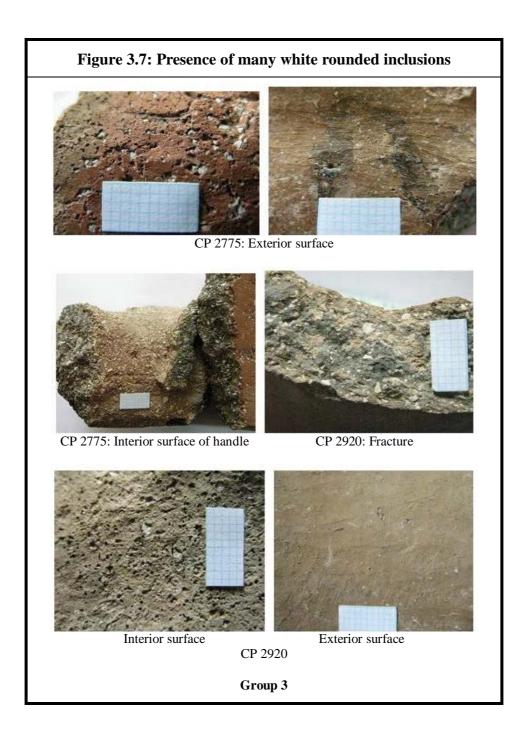
Pilot study of Korakou HBW^1

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¹ Illustrations also presented in: *CD-ROM, PDF file 3.4*. All photographs presented in this section have been taken by the author.

Figure 3.6: Inclusions present and groups established in: Rutter 1975 for Korakou HBW

Rutter's groups	Reference number	Many white glistering flakes	Striated elongated voids	Mainly small inclusions	Dull red rounded inclusions	Very large inclusions	Many ro unded white inc lusio ns
3	CP 2920	3					
3	CP 2775						
4	CP 2919						
:	CP 336						
	CP 130						
1	CP 2922						
	CP 2923						
	CP 2928						
	CP 337						
1	CP 2929						
	CP 2930						
	CP 2926						
2	CP 2927						
	CP 2921						
1	CP 2925						
Total	15	7	4	2	9	8	2



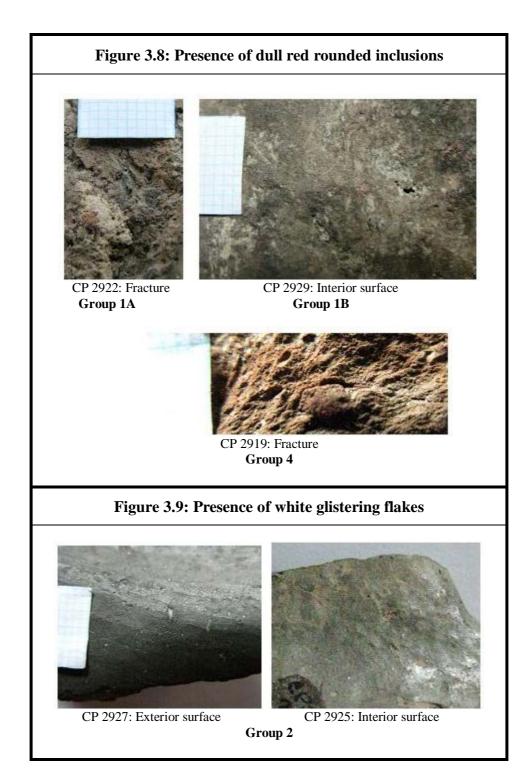
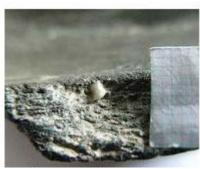
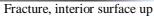


Figure 3.10: Particular features

CP 2927







Exterior surface

CP 2923



Interior surface



Exterior surface on plastic decoration

CP 2922

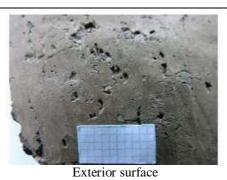
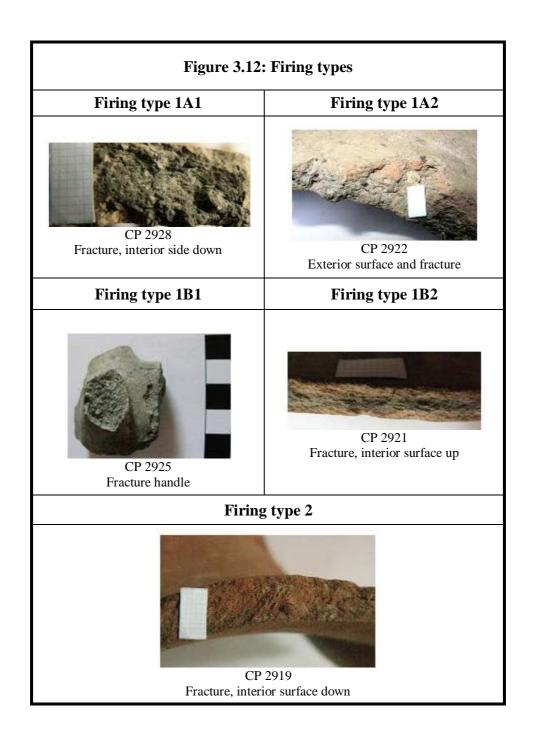
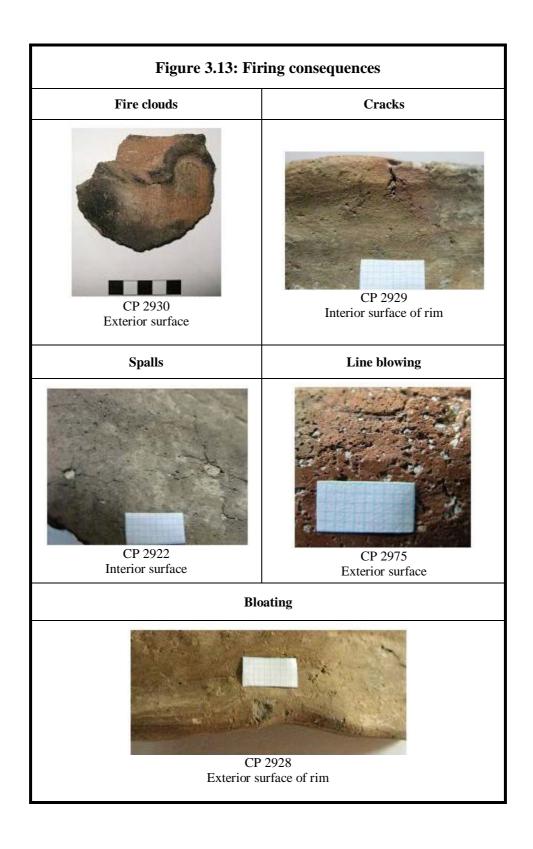
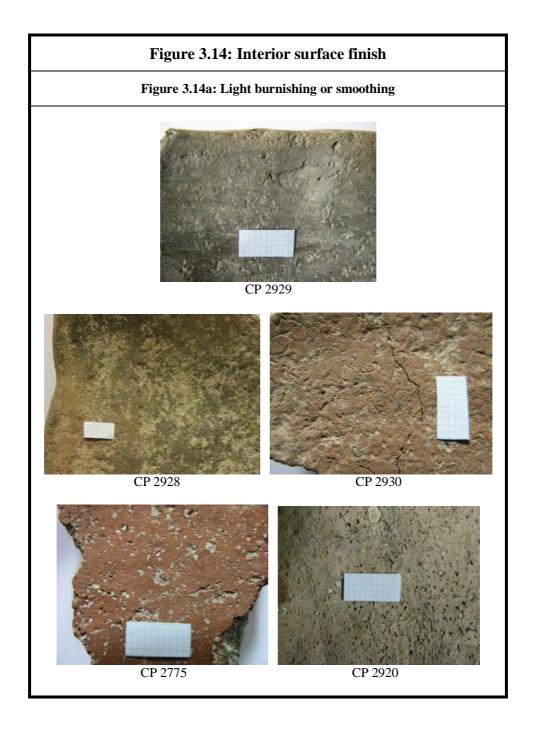


Figure 3.11: Firing conditions

Firing types	Core	Surfaces	Margins	Hardness	Texture of fracture	Specimens references
Type 1A1		Light-co loured	No	Med H		CP 2928 CP 2930 CP 337? CP 130?
Type 1A2	Dark	mottled	One side only: reddish- brown	Med H to Crumbly	Hac kly	CP 2922 CP 2923 CP 2929 CP 2775 CP 2920
Type 1B1	grey	Dark-coloured	No	Med H to H		CP 336? CP 2925 CP 2926 CP 2927
Type 1B2		Darrowald	Red	Н	Granular	CP 2921
Туре 2	Red	Red homogenous	No	н	Granular	CP 2919







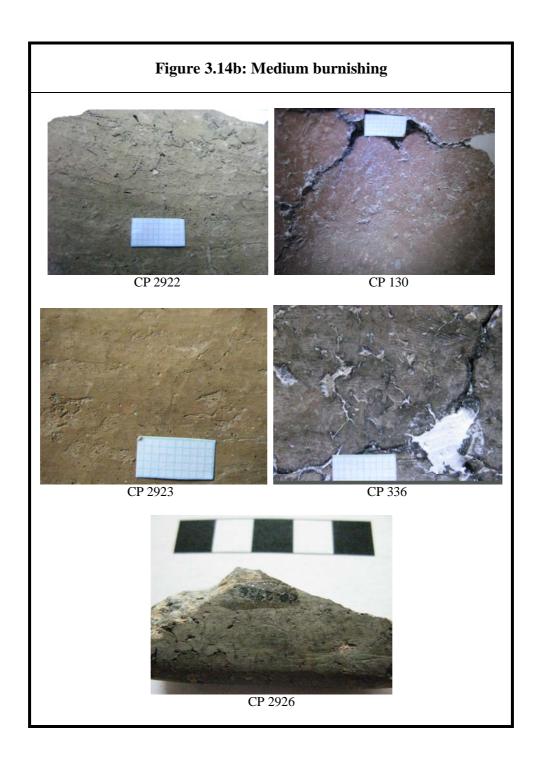




Figure 3.15: Exterior surface finish

Figure 3.15a: Mainly aesthetic reasons?





CP 337: Exterior surface

CP 2775: Exterior surface

Figure 3.15b: Mainly functional reasons?



CP 2919: Exterior surface



CP 2928: Exterior surface and handle



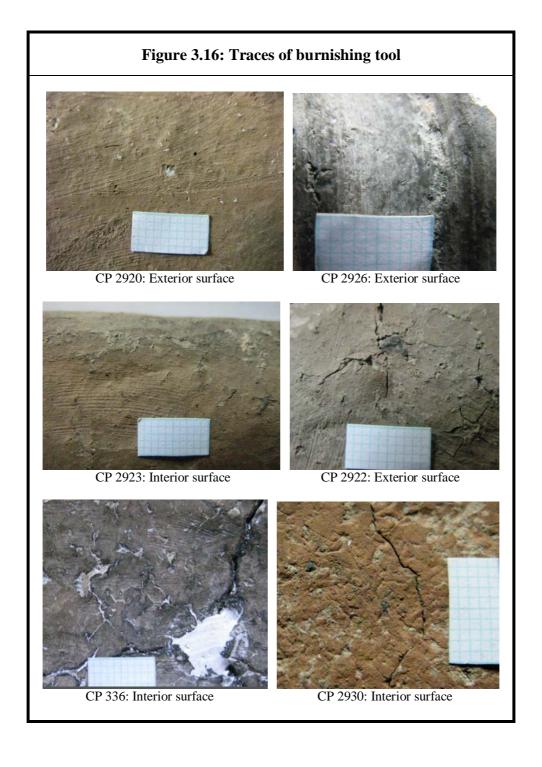


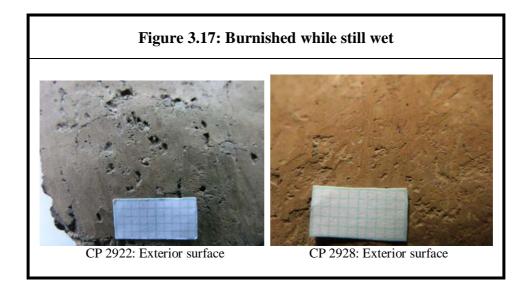
CP 2921: Exterior surface and handle

CP 2927: Exterior surface



CP 2925: interior surface





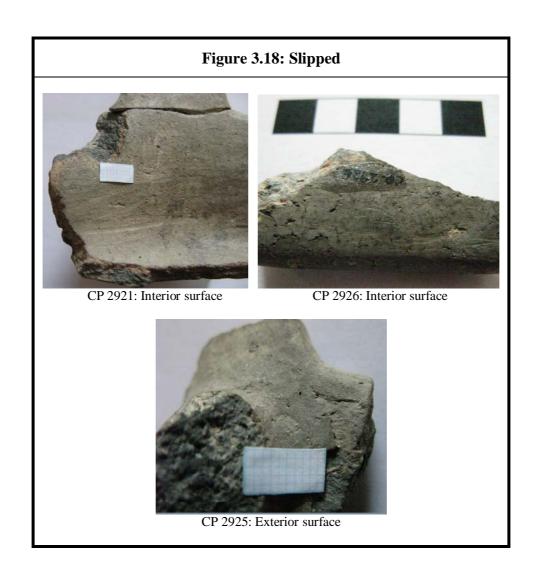


Figure 3.19: Comparison between Fabric groups and firing types

Firing types	Fabric groups	Specimen references	No of specimens	
	C 14 B	CP 2928 CP 130?		
TypelAl	Groups 1A-B	CP 2930 CP 337?		
	Groups 1A-B	CP 2922 CP 2923	9	
Type 1A2	0.6.00*(0.6000.400)	CP 2929]	
	Group 3	CP 2775 CP 2920		
0	10 1000	CP 336		
Type 1B1	Group 1A Group 2	CP 2925 CP 2926 CP 2927	5	
Type 1B2	Group 2	CP 2921		
Туре 2	Group 4	CP 2919	1	

Figure 3.20: Comparisons fabric groups-interior finish quality

Interior finish quality	Low	Medium	High
Fabric Group 3	CP 2775 CP 2920		
Fabric Group 1A	CP 2928	CP 2922 CP 2923 CP 130 CP 336	
Fabric Group 1B	CP 2929 CP 2930		CP 337
Fabric Group 2		CP 2926	CP 2921 CP 2927 CP 2925
Fabric Group 4			CP 2919

Figure 3.21: Comparisons firing types-interior finish quality

Interior burnishing quality	Low	Medium	High
Firing type 1A1	CP 2928 CP 2930	CP130	
Firing type 1A2	CP 2929 CP 2775 CP 2920	CP 2922 CP 2923	
Firing type 1B1		CP 336 CP 2926	CP 2927 CP 2925
Firing type 1B2			CP 2921
Firing type 2			CP 2919

Figure 3.22: Comparison burnish and size of vessels

Interior burnishing quality	Low	Medium	High
Small v essels		CP 2926	CP 2921 CP 2927 CP 2925
Medium vessels	CP 2929 CP 2928 CP 2930		CP 337
Largevessels	CP 2775 CP 2920	CP 2922 CP 2923 CP 130 CP 336	CP 2919

Figure 3.23: Comparisons fabric groups, firing types and interior finish quality

Specimens references	Fabric groups	Firing types	Interior finish quality	Vesselsizes	
CP 337	1B	1A	High	Medium	
CP 2920 CP 2775	3	1A	Low	Large	
CP 2930	1B				
CP 2929	10	1A	Low	Medium	
CP 2928	1A	*****			
CP 130	*			3	
CP 2922	1A	1A	Medium	Large	
CP 2923	ın		Medium	Large	
CP 336		1B			
CP 2926			Medium	Medium	
CP 2927	2	1B			
CP 2925	2	1.0	High	Small	
CP 2921			100 martines		
CP 2919	4	2	High	Large	

Pilot Study of HBW comparisons²

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 $^{^2}$ Illustrations also presented in: *CD-ROM*, *PDF file 3.4*. All photographs presented n this section have been taken by the author.

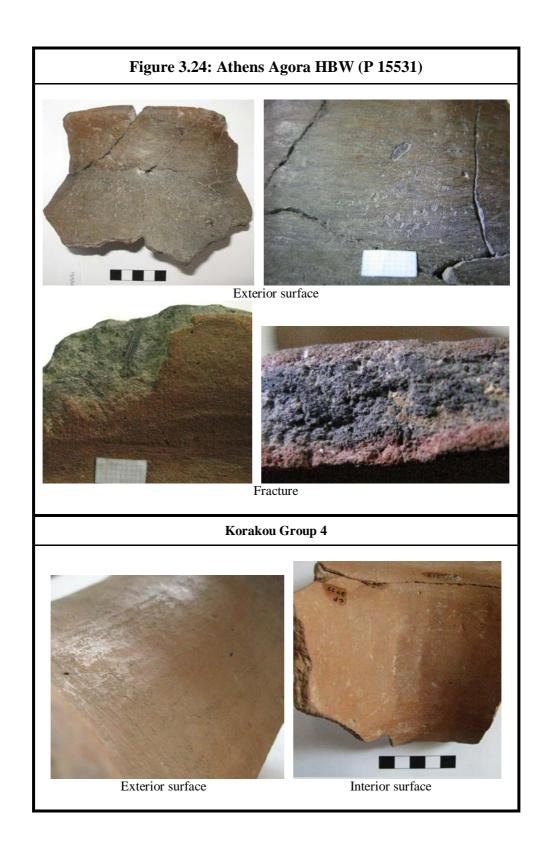


Figure 3.25: Corinth handmade pottery

Figure 3.25a: Observations related to the fabric consistency



Exterior surface Corinth: No. 75 265 10



Interior surface Corinth: No. 75 266 8



Corinth: No. 75 263 4 Interior surface



Korakou group 3: CP 2920

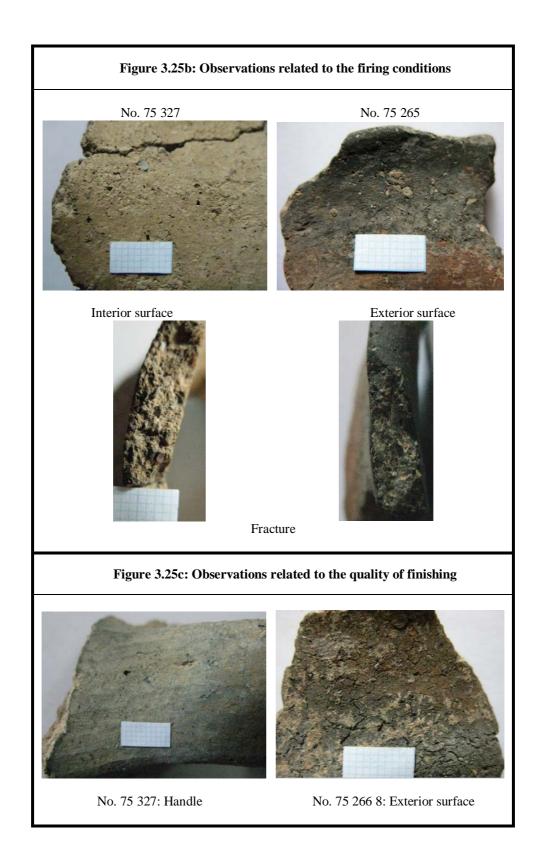


Figure 3.26: Lefkandi HBW

Figure 3.26a: Observations related to the fabric and to the firing conditions

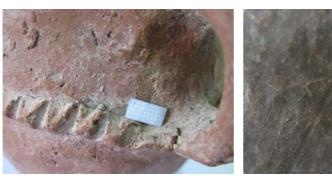


Exterior surface, bottom "Italian" cup (65/P107)



Rounded jar (69/P17)

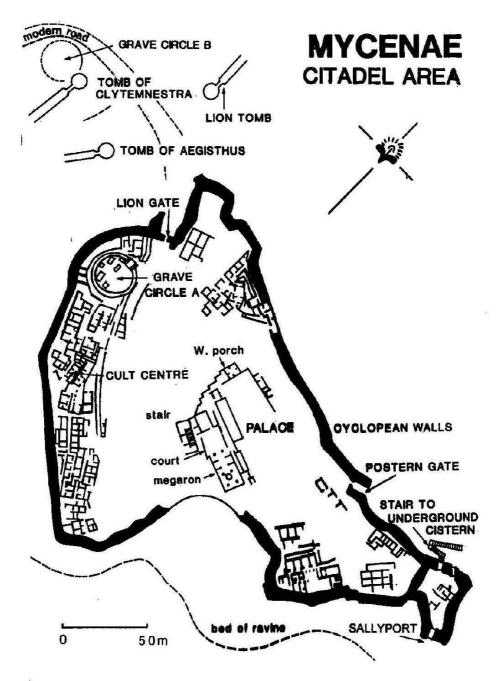
Figure 3.26b: Observations related to the quality of craftsmanship



"Italian" cup: Exterior surface Rounded jar: Interior surface

Chapter 4: HBW from Mycenae

Figure 4.1: Map of the location of the Cult Centre in the site of Mycenae



(From K.A. and D. Wardle 2000: fig.4)

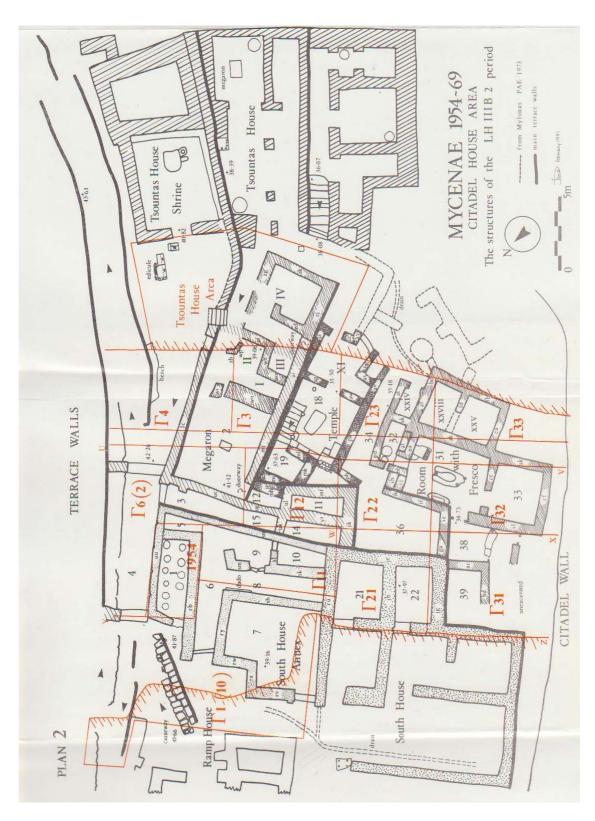
Figure 4.2: Data table concerning the Mycenae Archive notebooks selected and the quantity of HBW counted

Mycenae Archives	Trench/ Year of excavation	Total quantity of units ¹	_	tity of seen	Quan of un seen	nits with	wit HB	ts :h	Quantity HBW sherds certain	Quantity HBW sherds uncertain
3090	G23'64	238	$?^{3}$		9				16	9
3090	G23'66	131	?		12				26	12
3091	G23'68	121	?		9				9	8
3095	G32'69 I		61		32		41		49	5
3096	G32'69 I	402	17	244	32	- 58	41	24	47	3
3097	G32'69 II	402	125	244	15	30	12	Z 4	18	9
3098	G32'69 III		41		11		27		10	4
3099	GMB'68	196	1.	17	56	5	48	3	194	42
3100	GMBW'68 I	324	121	181	47	57	39	31	121	12
3101	GMBW'68 II	324	60	101	10	37	17	51	33	1
Total					201				476	102

(Based on my own count of Mycenae Archives, provided by E. French and K. Wardle).

¹ For the Trench/year concerned, based on the count of the units in the excel file of Mycenae phasing. ² Based on the units seen only. ³ I didn't write down the total quantity of units seen for these 3 notebooks.

Figure 4.3: Map of Cult Centre with areas of excavation



(From WBM 1: Plan 2)

Figure 4.4: Mycenae Chronological phasing and codes

A) Phase	Codes (The first two digits of each code denote pha	ase, the sec	ond two context within phase)
01	Neolithic	= I	in Fasc. 1 p. 7
02	Early Helladic	= II	in Fasc. 1 p. 8
03	Middle Helladic	= III	in Fasc. 1 p. 8
04	Prehistoric cemetery (MH > LH II)	=IV	in Fasc. 1 p. 8
05	LH IIIA	= V	in Fasc. 1 p. 8
06	Terrace fill below LH IIIB structures	= VI	in Fasc. 1 p. 8
065	Construction in LH IIIB	=VIB*	•
07	Destruction in mid-LH IIIB,	= VII	in Fasc. 1 p. 9
	? as a result of earthquake		-
08	Destruction at end of LH IIIB 2,	= VIII	in Fasc. 1 p. 10
	with widespread fire		•
09	Early LH IIIC	= IX	in Fasc. 1 p. 11
10	Early-Tower phases of LH IIIC	= X	in Fasc. 1 p. 11
11	Advanced and developed phases of LH IIIC	=XI	in Fasc. 1 p. 11
12	Wash levels and graves, final LH IIIC,		-
	Sub-Mycenaean, Protogeometric		
13	Geometric > Classical	= XIII	in Fasc. 1 p. 11
14	Hellenistic	= XIV	in Fasc. 1 p. 11
15	Surface		•
* Not sepa	rately described in Fasc. 1		

B) Contexts within Phases

(These codes have been applied as consistently as possible regardless of phase but variations will arise depending on the stratigraphic circumstances of each. The order is where possible a logical one, but already the study of individual phases has required the introduction of additional definitions. For simplicity, these have been allotted to vacant codes without changing those already determined.)

00	Apparently this phase, (often not yet studied)			
05	Deliberate infill			
Construction				
10	Not further subdivisible	11	Fill below floors	
12	In walls/built features	13	Below walls/features	
14	Fill behind walls	15	In floor 1	
16	In beam slots or cuttings	17	In (fallen) ceiling/upper floor	
18	Levelling/terracing below walls & floors	19	Deliberate foundation deposit	
Use/Alterations				
20	General (not further definable)	21	On floor 1 and in drains	
22	Between floor 1 and 2	23	On floor 2	
24	Between floor 2 and 3	25	In floor 2	
26	On floor 3	27	Accumulated debris	
28	Accumulated debris in secondary context	29	Deliberate pit-fill	
Destruction/Abandonment				
30	General	31	Floor deposit	
32	Initial collapse including earth and mudbrick	33	Calcined debris	
34	Upper fill	35	Later collapse and wash	
39	Destruction debris in secondary context		•	

(From WBM 10: 85)

Disuse

..40

Disturbance

..49

(Codes from ..50 will be used, if necessary, for chronological divisions of phases already defined. E.g. 0661 = fill below floors of phase 065 [VIB]).

C) Abbreviations for Periods and Pottery Ranges

C) Appreviations for reflous and rottery Ranges				
Neo	Neolithic	EH	Early Helladic	
MH	Middle Helladic	I	Late Helladic I	
II	Late Helladic II	A1	Late Helladic IIIA 1	
A2	Late Helladic IIIA 2	B1	Late Helladic IIIB 1	
B2	Late Helladic IIIB 2	Ce	Late Helladic IIIC Early	
Ct	Late Helladic IIIC Tower	Cd	Late Helladic IIIC Developed	
Ca	Late Helladic IIIC Advanced	Cf	Late Helladic IIIC Final	
SM	Sub-Mycenaean	PG	Protogeometric	
Geom	Geometric	PCor	Protocorinthian	
Arch	Archaic	Class	Classical	
Hell	Hellenistic	PM	Post-Mycenaean	

The following abbreviations apply to pottery only:

XS Surface, useless for dating XM Mixed

Y Undiagnostic and datable only by context

e.g.

XS(MH) Surface but chiefly MH XM(MH) Mixed but chiefly MH

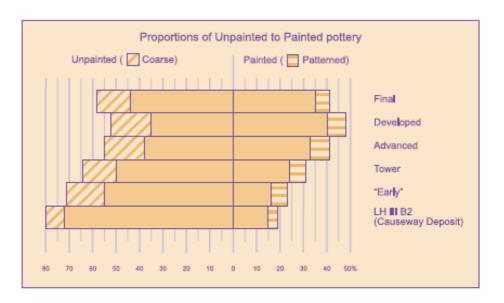
Y(?MH) Undiagnostic but possibly with MH

All pottery is recorded with a total span (i.e. Neo > Hell) with note of important components or points of special interest.

Note: LH IIIC Early phase and part of Tower phase now equal LH IIIC early in P.A. Mountjoy, Mycenaean Decorated Pottery (MDP) pp. 134–54. The rest of LH IIIC Tower phase and Developed and Advanced phases now equal LH IIIC middle in MDP pp. 155–80. LH IIIC Final phase now equals LH IIIC late in MDP (NB. her definition of LH IIIC late and Sub-Mycenaean p. 181).

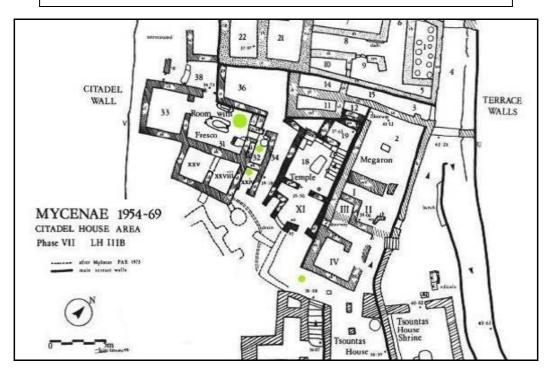
(From WBM 10: 86)

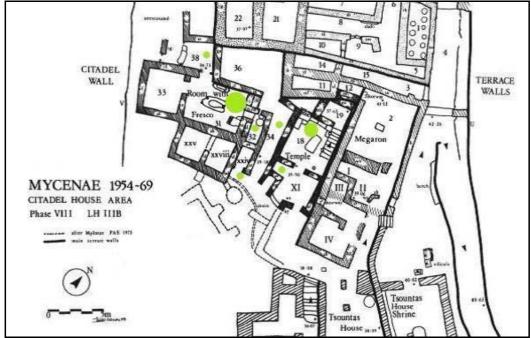
Figure 4.5: Diagram of painted and unpainted pottery proportions of Mycenae sampling in: Sherratt 1981



(From WBM 16/17: CD-ROM 826, graph 4)

Figure 4.6a: Cult Centre maps of phases VII and VIII with areas where HBW has been found

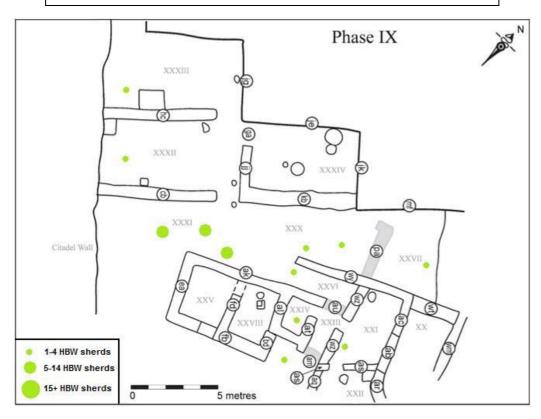


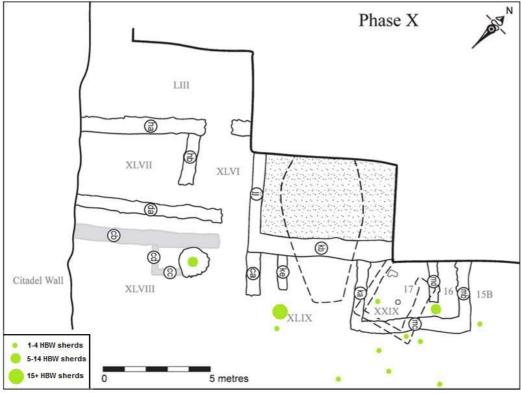


1-4 HBW sherds5-14 HBW sherds15 + HBW sherds

(Maps provided by K. Wardle, with additional information)

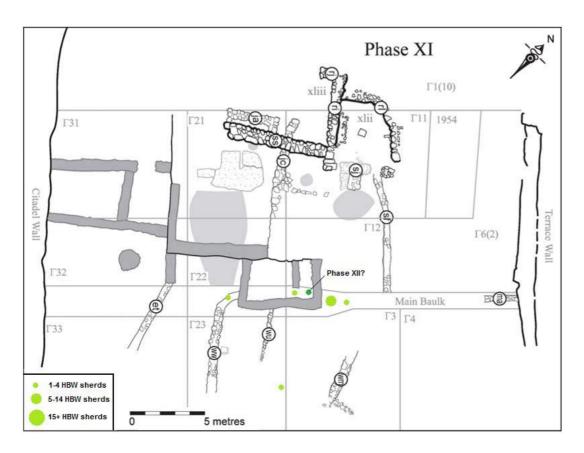
Figure 4.6b: Cult Centre maps of Phases IX and X with areas where HBW has been found





(Maps from: WBM 16/17: figs. 1-2, with additional information)

Figure 4.6c: Cult Centre map of Phases XI-XII with areas where HBW has been found



(Maps from: WBM 16/17: fig. 3, with additional information)

Figure 4.7a: Quantitative and chronological table of Mycenae HBW, proportion of present sample

Period	LH IIIB			LH ШС					Post-Mycenaean?				
Phase ⁴	VII	VII/ VIII	VIII	VIII / IX	IX	IX/ X	X	X/ XI	XI	XII	IX/ XIII	XI/ XIV	XIV
Quantity total units	72	26	354	20	188	29	158	20	172	3	2	54	29
Quantity units seen ⁵	38	19	>172	>3	>66	>14	>72	>7	>55	3	2	54	29
Quantity units with HBW ⁶	8	3	39	3	28	4	32	4	32	3	1	24	16
% of units seen	52.8	73.1	48.3	15	35.1	48.3	45.6	35	32	100	50	100	100
HBW as % of total units	11.1	11.5	11	15	14.9	13.8	20.3	20	18.6	100	50	44	55.2
HBW as % of units seen	21	15.8	22.7	100	42.4	28.6	44.4	57.1	58.2	100	100	44	55.2

(Based on my own count of the Mycenae Archives, provided by E. French and K. Wardle).

 $^{^4}$ According to the information taken from the Mycenae phasing excel list provided by E. French and K. Wardle. Some units have been give two phases and they are kept separately in the table.

⁵ In some cases, I haven't counted the amount of units seen. The sign ">" means that the quantity indicated is

the lowest amount seen.

⁶ From units records examined and on the basis of the pottery study undertaken by the Mycenae excavation team under the supervision of E. French.

Figure 4.7b: Quantitative and chronological table of Mycenae HBW, proportion and evolution of HBW

Period	LH IIIB			LH ШС					Post-Mycenaean?				
Phase ⁷	VII	VII/ VIII	VIII	VIII/ IX	IX	IX/ X	X	X/ XI	XI	XII	IX/ XIII	XI/ XIV	XIV
Quantity HBW sherds uncertain	8	0	11	0	18	1	5	3	28	0	0	10	19
Quantity HBW sherds certain	3	4	81	8	36	4	78	15	84	19	1	56	82
HBW max.	11	4	92	8	54	5	83	18	112	19	1	66	101
Total all pottery ⁸	2198	895	12008	1717	7158	331	4896	1123	4637	172	131	2617	2674
% mini. HBW of total pottery	0.14	0.45	0.67	0.47	0.50	1.21	1.60	1.33	1.81	11.05	0.76	2.14	3.07
% max. HBW of total pottery	0.50	0.45	0.77	0.47	0.75	1.51	1.70	160	2.42	11.05	0.76	2.52	3.78
% mini. HBW of total HBW	0.64	0.85	17.2	1.70	7.64	0.85	16.56	3.18	17.8	4.03	0.21	11.89	17.41
% max. HBW of total HBW	1.92	0.70	16.03	1.39	9.41	0.87	14.46	3.14	19.5	3.31	0.17	11.50	17.60

⁷ According to the information taken from the Mycenae phasing excel list provided by E. French and K. Wardle. Some units have been give two phases and they are kept separately in the table.

8 From units examined only.

Figure 4.8a: Comparisons of samples studied between Sherratt 1981 and Romanos 2011

Areas	Sherratt 1981	Romanos 2011			
			%		
G32'64/66	104	21	3.7		
G32'69	104	236	41.8		
G23'68		9	1.6		
GMBW'68		181	32.1		
GMB'68		117	20.7		

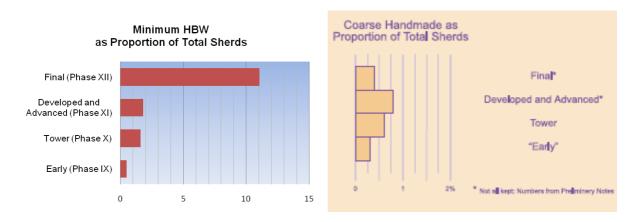
Phases	Sherra	tt 1981	Romanos 2011			
		%		%		
VII			46	8.2		
VIII			206	36.5		
IX	46	44.2	87	15.4		
X	28	26.9	70	12.4		
XI	22	21.2	54	9.6		
XII	8	7.7	3	0.5		
XIV/XI			93	16.5		
undetermined			5	0.9		

TOTAL	104	564
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Figure 4.8b: Diagrams of comparisons of Mycenae HBW proportion on total pottery between Sherratt 1981 and Romanos 2011

Romanos 2011

Sherratt 1981



(Based on the information presented in: [Figure 4.7])

(From WBM 16/17: CD-ROM 827, graph 6)

Figure 4.9a: Diagram of HBW proportion on total pottery quantity per phase

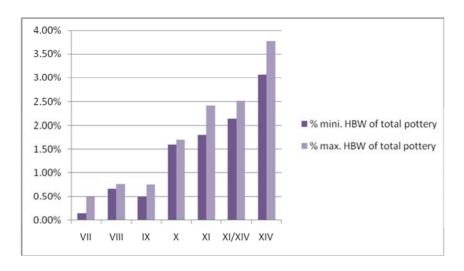
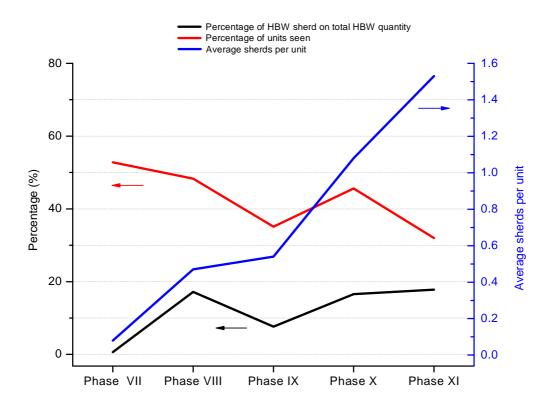


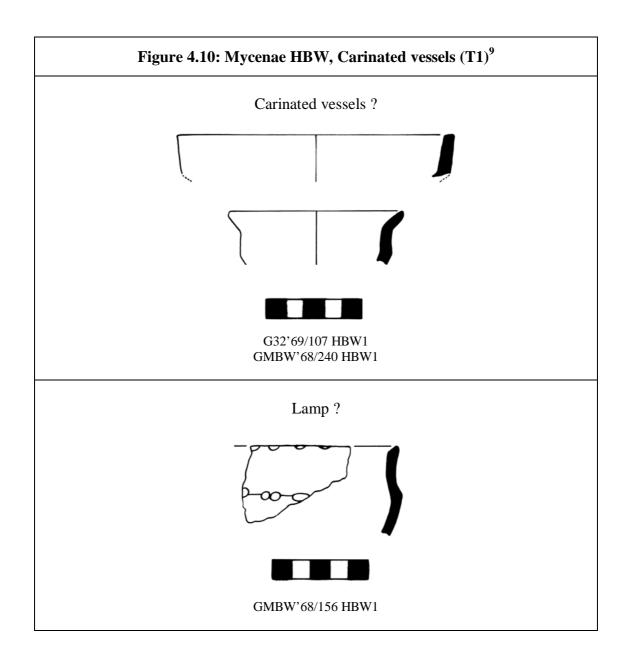
Figure 4.9b: Diagram of HBW quantitative evolution per phase



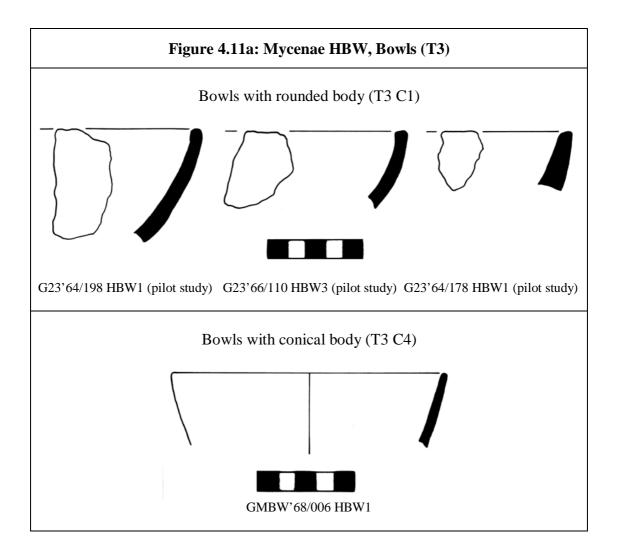
Percentage of HBW sherds on total HBW quantity: based on count of minimum HBW quantity from [Figure 4.7b]

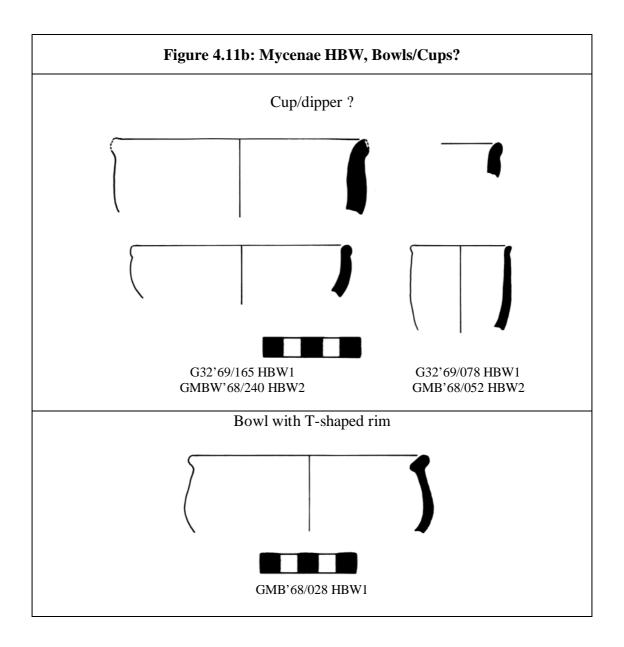
Percentage of units seen: from [Figure 4.7a]

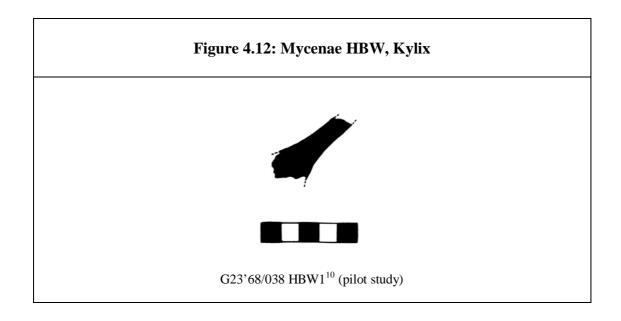
Average sherds per unit: based on the division of quantity of HBW sherds by the quantity of units seen, both quantities from [Figure 4.7]

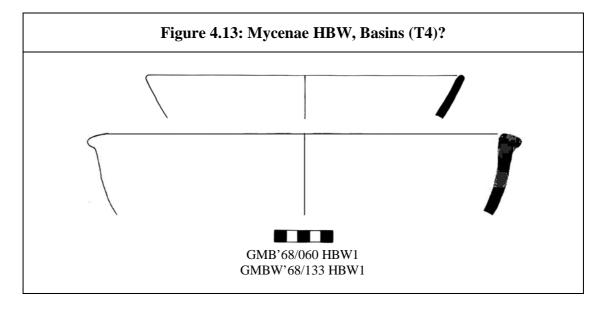


 $^{^9}$ All drawings (except mentioned otherwise) were made on the basis of E. French drafts taken from the Mycenae Archives, with addition of other half when the diameter was given.



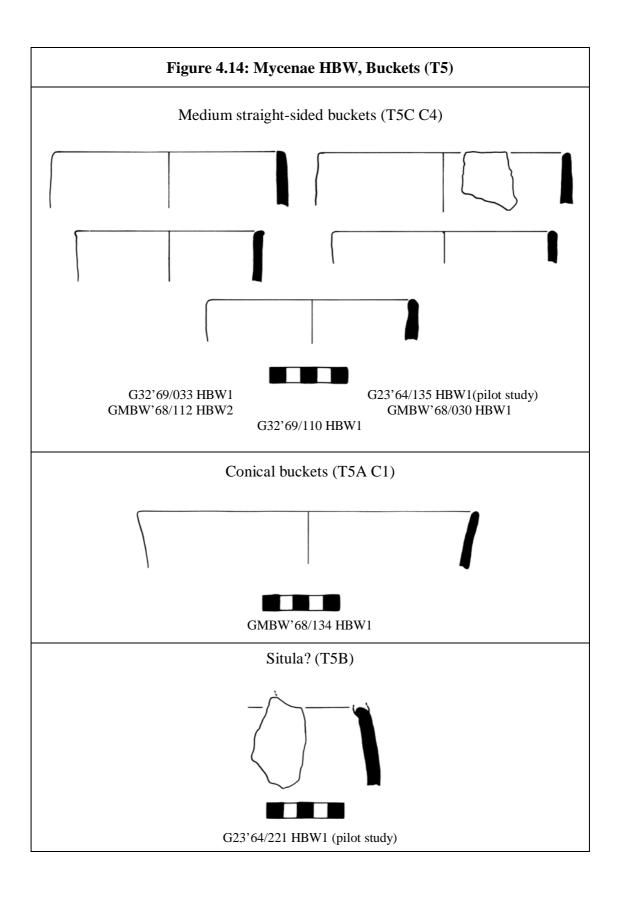


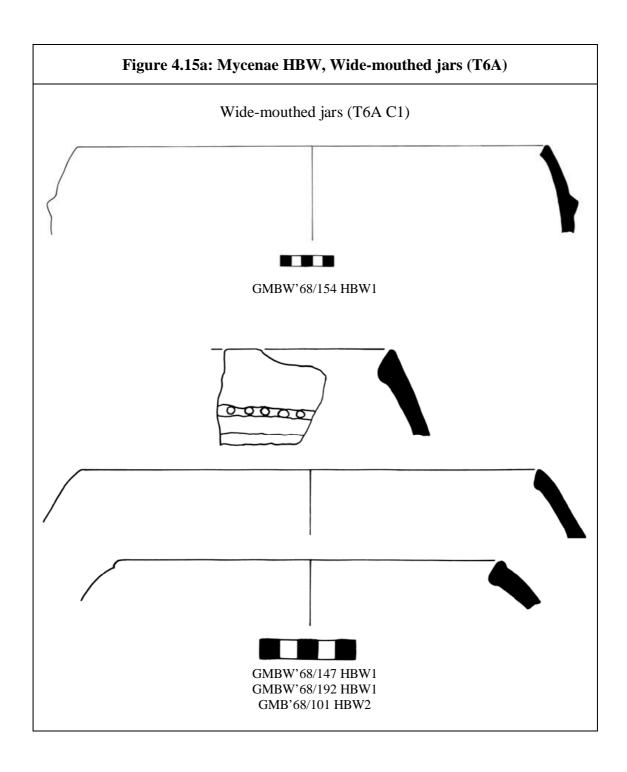


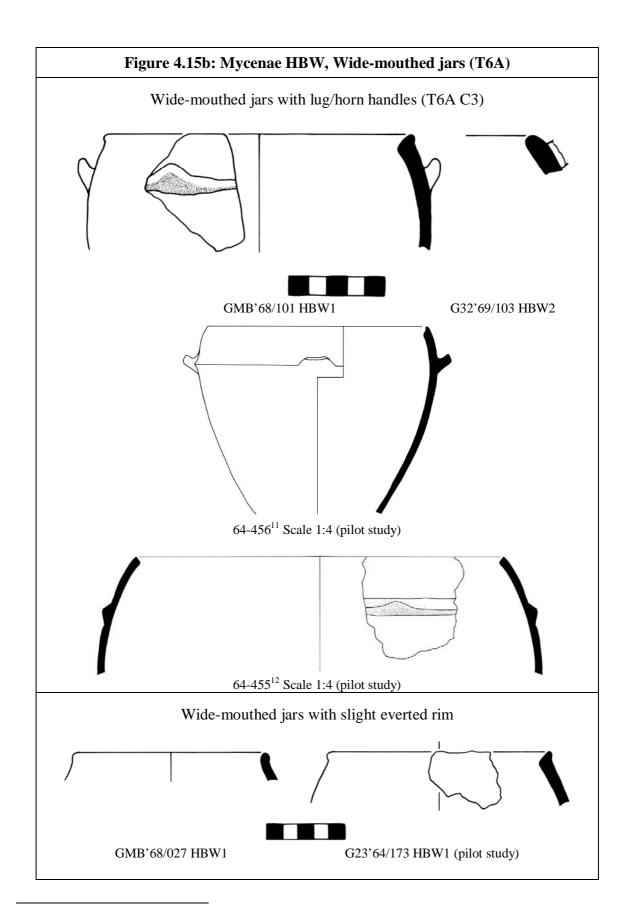


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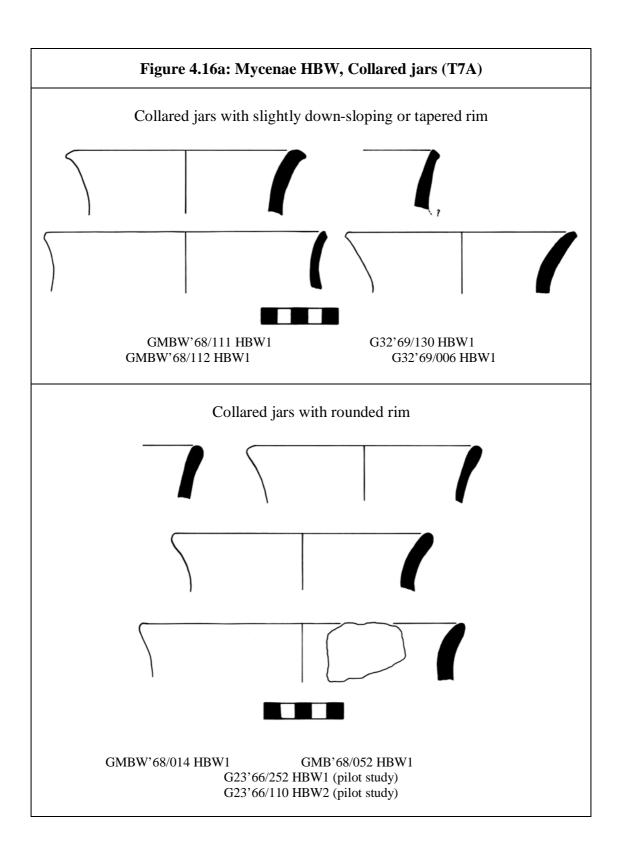
 $[\]overline{}^{10}$ Drawing by the author.

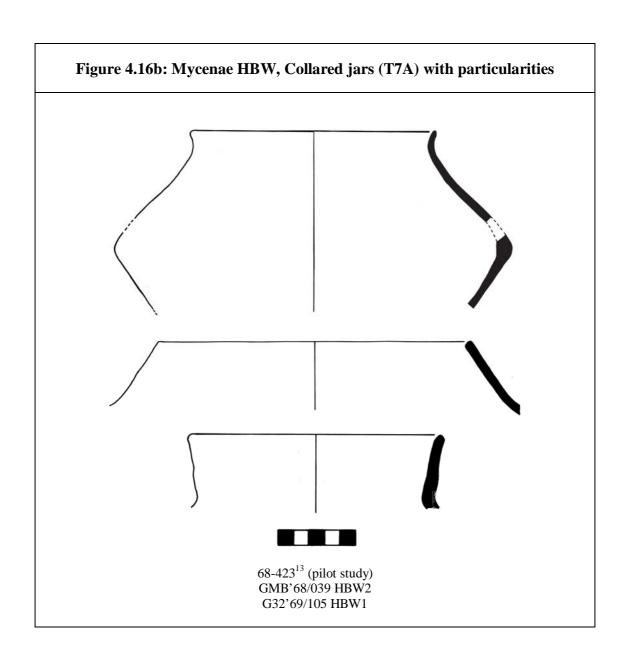




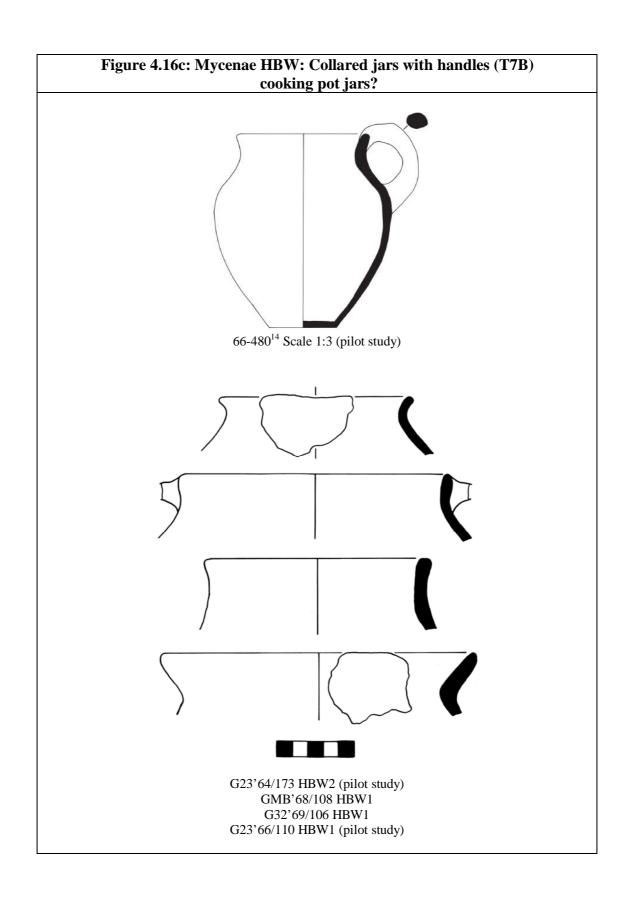


 $^{^{11}}$ From WBM 16/17: CD-ROM, with addition of other half. 12 From WBM 16/17: CD-ROM, with addition of other half.

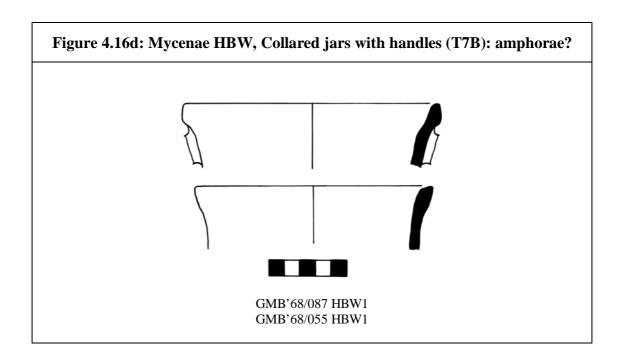


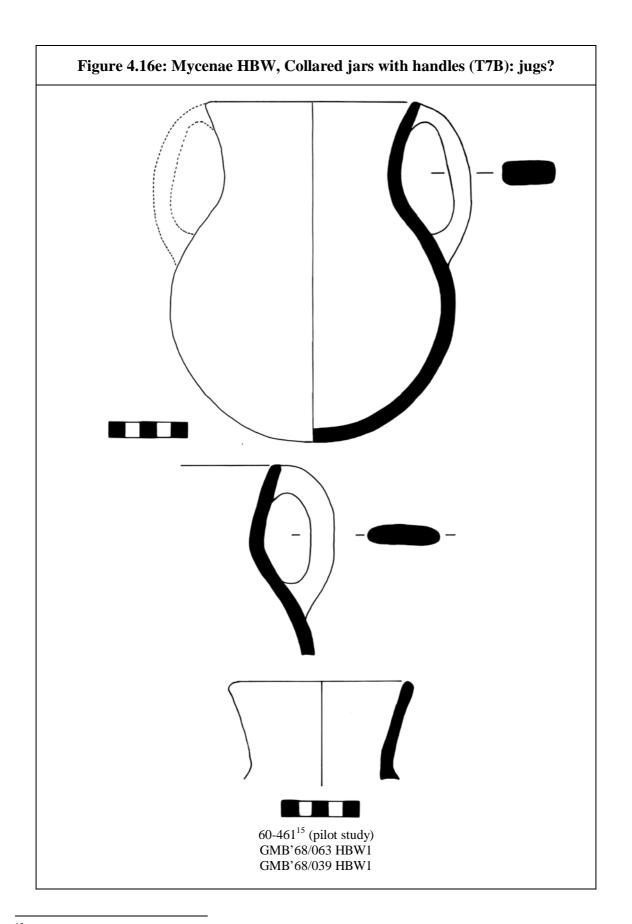


13 Illustration provided by E. French and R. Andrew, with addition of other half.

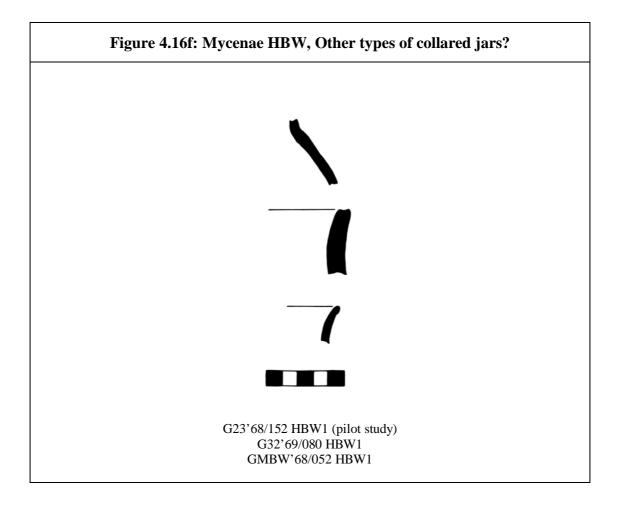


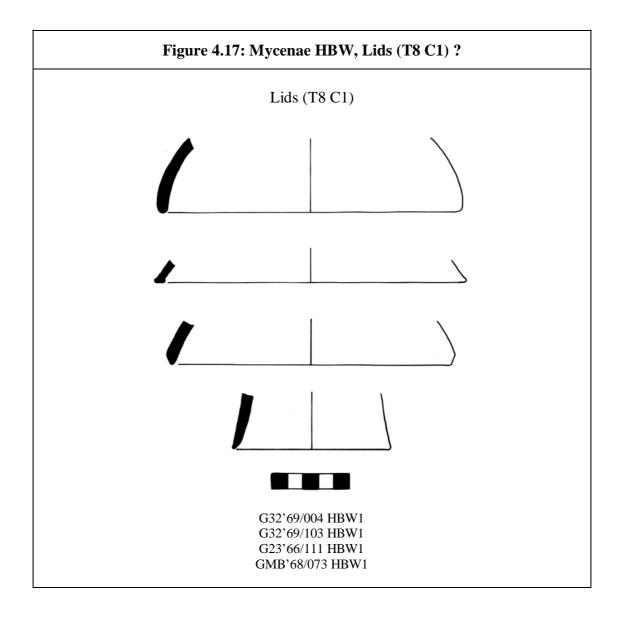
 14 From WBM 16/17: CD-ROM, with addition of other half.





¹⁵ Drawing by the author.





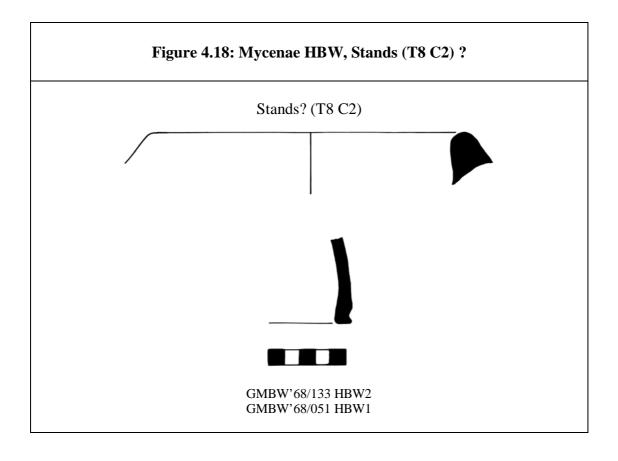
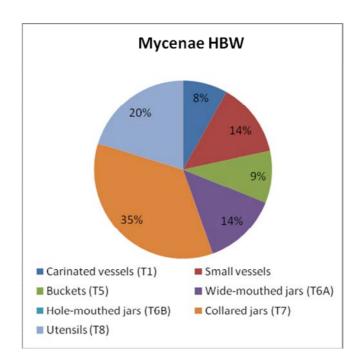


Figure 4.19: Diagram of proportion of HBW shape types from Mycenae



(Based on the 74 HBW specimens listed in: CD-ROM 4.2)

Figure 4.20a: Chronological distribution of Mycenae HBW shapes

Periods	Phases	Shapes and quantity			
	Phase VII or Phase VIII Early: LH IIIB Mid or Late	2 collared jars 1 carinated vessel 1 cup/dipper 2 buckets: straight			
LH IIIB (20 specimens)	Phase VIII Late: LH IIIB Late	4 collared jars 2 bowl/lid: conical, round 1 carinated vessel 1 wide-mouthed jar 1 cup/dipper			
	Phase VIII Late or Phase IX Early: LH IIIB/C	3 collared jars (1 cooking pot jar?) 2 bowls/lids: rounded, conical			
	Phase IX: LH IIIB/C or IIIC Early 1?	2 collared jar (1 cooking pot jar) 2 bowls/lids: rounded 2 carinated vessels 1 wide-mouthed jar 1 cup/dipper 1 kylix			
LH IIIC Early (23 specimens)	Phase X: LH IIIC Early 2	3 collared jars 1 bowl/lid: rounded 2 carinated vessels (1lamp?) 4 wide-mouthed jars 1 bucket: conical 1 basin? 1 stand? 1 situal?			
	Phase XI Early or Phase X Late?: LH IIIC Middle?	1 collared jar (cooking pot jar?) 1 bowls/lid: rounded 3 wide-mouthed jars 1 bucket: straight			
LH IIIC Middle to Late (30 specimens)	Phase XI Late: LH IIIC Middle	8 collared jars (2 cooking pot jars, 2 amphorae?) 3 bowl/lid: conical, rounded 1 carinated vessel 2 buckets: straight 1 basin: conical 2 stands?			
	Phase XII?: LH IIIC Late?	2 collared jars			
	Phase XIV/XI: LH IIIC Late?	1 collared jar 1 wide-mouthed jar 2 bowls 1 crucible?			

(Based on the material presented in: CD-ROM, Excel table 4.2)

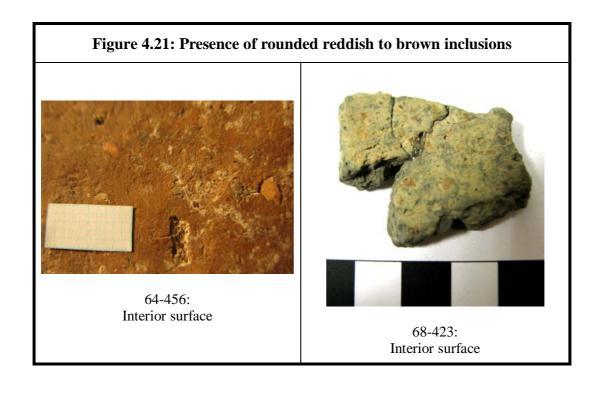
Figure 4.20b: Geographical and chronological distribution of Mycenae HBW shapes

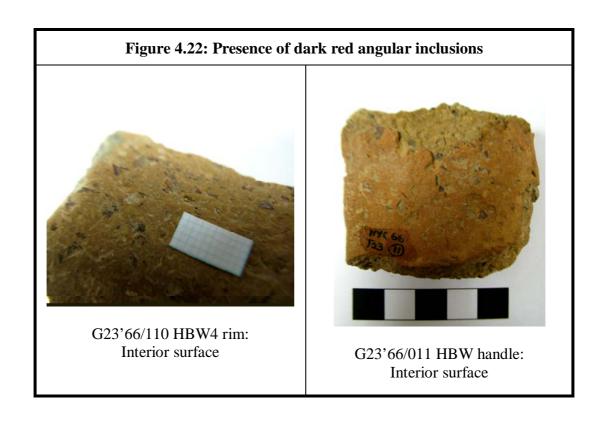
Phase	Area	Total HBW	Collared jar	Bowl/ lid	Carinated vessel	Cup/dipper	Wide-mouthed jar	Bucket	Other
Phase VII/	Rm 31	36	1		1?	1		1	1?
Phase VIII Early	Tsountas House A.	1	1						
	Rm 18	32	1	1	1	1			
Phase VIII	Rm 31	22	1	1			1?		
Late	Rm 32	1	1						
Late	Small Court.	1	1					_	
Phase VIII/ Phase IX Early	Rm 18	7	3	2					

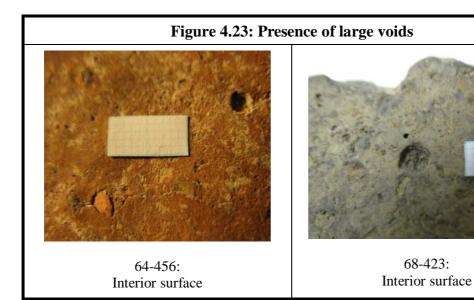
Phase	Area	Total HBW	Collared jar	Wide-mouthed jar	Bowl/ lid	Carinated vessel	Bucket	Bowl	Other
Phase IX	Over Rm 31	10	1	1				1	
	Rm xxiv	3							Kylix
	Over small	8		1	1	1?			
	court	_							
	Rm xxi	8			1				
	Below Rm xxxii	?				1			
	Rm xxxiii	1?	1						
Phase X	Over Rm xxx	37	1			1??	1		2 basins/ stands?
	Removal of Tower	9	1		1				
	Rm 16	3		2					
	Area 20	6		1					
	Over Rm 31	4		1					
	Over Rm xxi/xx	1	1						
	Rm xxxii	?				1			
	S of Rm 17	1		1					
Phase XI	Under Rm li	3		2					
Early	Over Rm xxi/xx	14	1	1	1?				
	Area lii	1					1		
Phase XI Late	Over Rm xxx	19	1				1		
	Rm at E	1	1						
	Over Rm 17/16	12	1						
	Over Rm xxi	4			2?				
	W of me	31	1						
	Wash by C. wall	?				1			
Phase XII	Over Rm 16	18	2						
Phase	J	17		1				1?	
XIV/XI	Below G	18 2	5		1		1	1	2 stands? Bowl? Crucible?

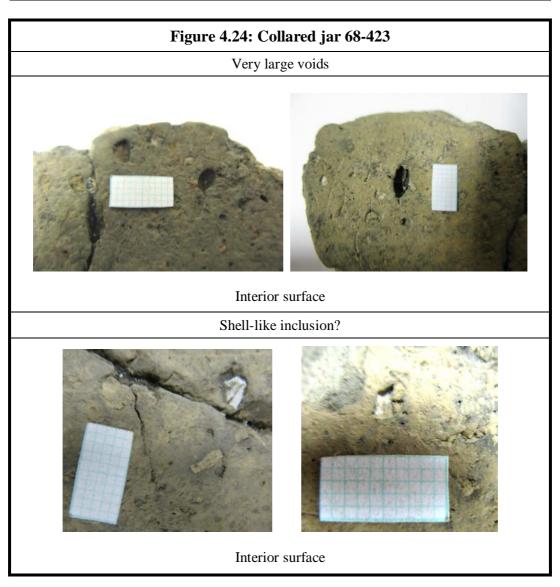
$\label{eq:Chapter 4.4:} \textbf{Preliminary fabric analysis of Mycenae HBW}^{\scriptscriptstyle 16}$

¹⁶ Illustration also presented in: *CD-ROM, PDF file 4.4*. All photographs presented in this section have been taken by the author.









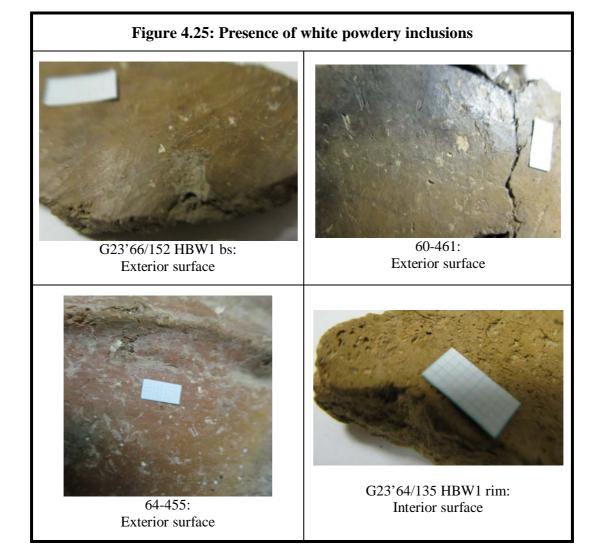


Figure 4.26: Very large angular inclusions



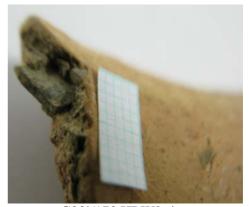
G23'64/135HBW1 rim: Interior surface



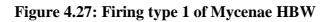
66-0480: Interior surface



G23'68/080 HBW4 bs: Fracture



G23'/173 HBW2 rim: Fracture and interior surface



Firing type 1



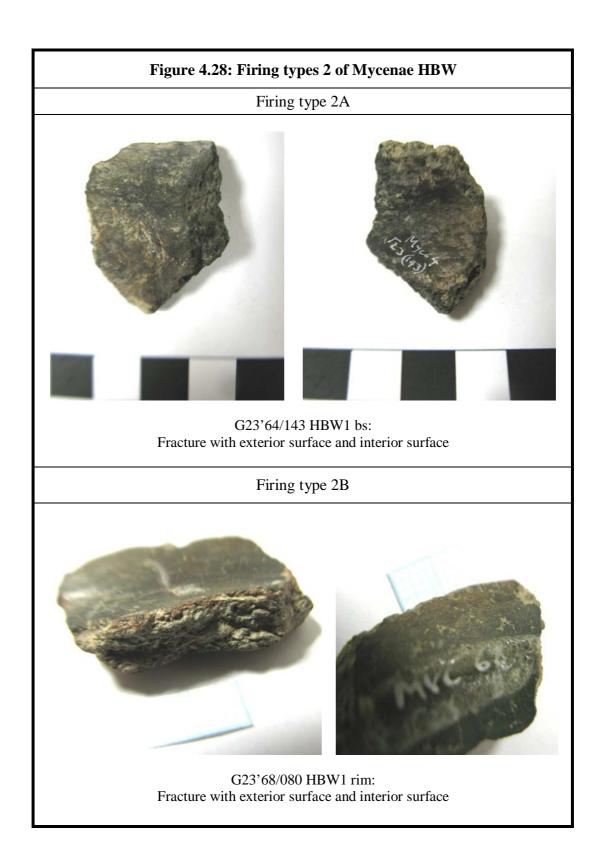


G23'64/173 HBW2 rim: Fracture with interior surface and exterior surface





G23' /35 HBW1 rim: Fracture with interior surface and exterior surface



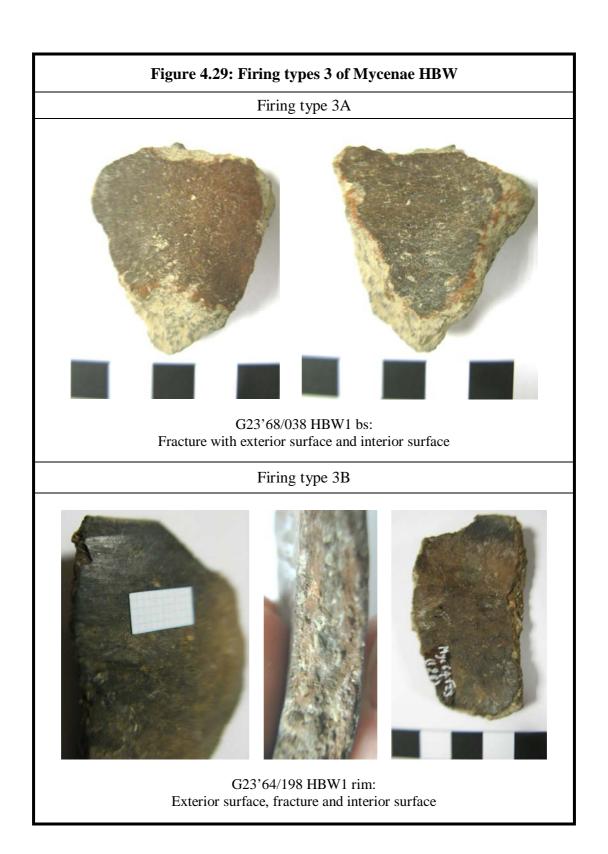


Figure 4.30: Firing types 4 of Mycenae HBW

Firing type 4A



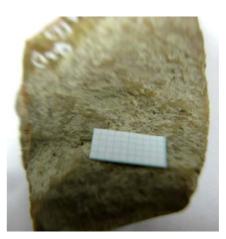


66-0480: Exterior surface, fracture with interior surface

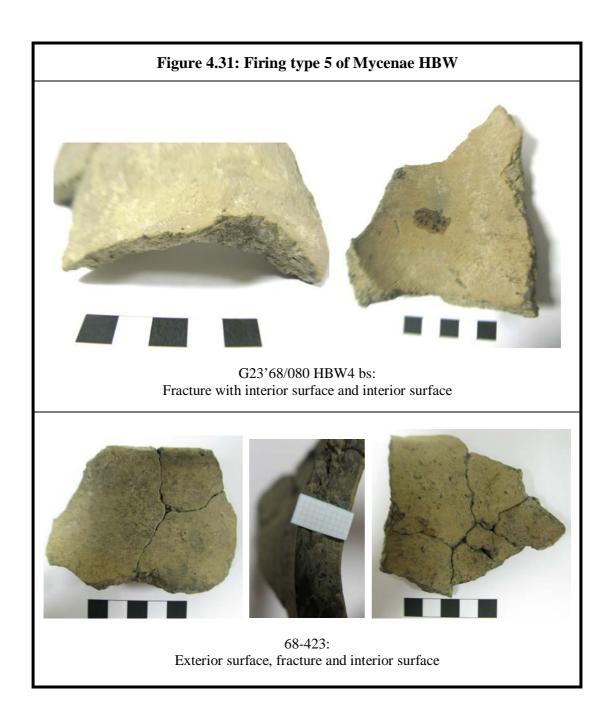
Firing type 4B

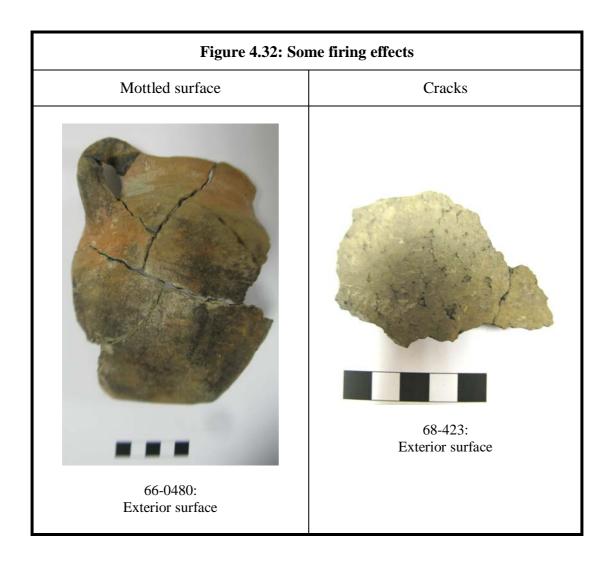


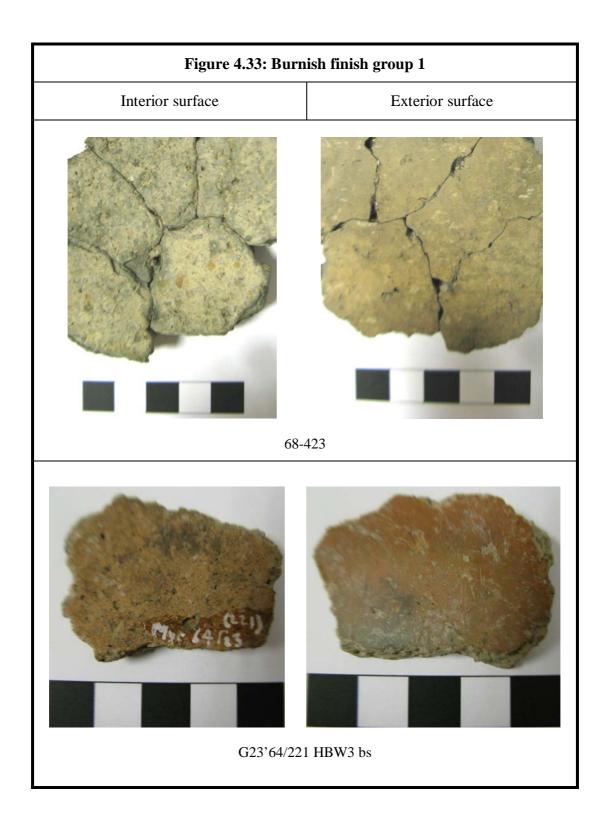


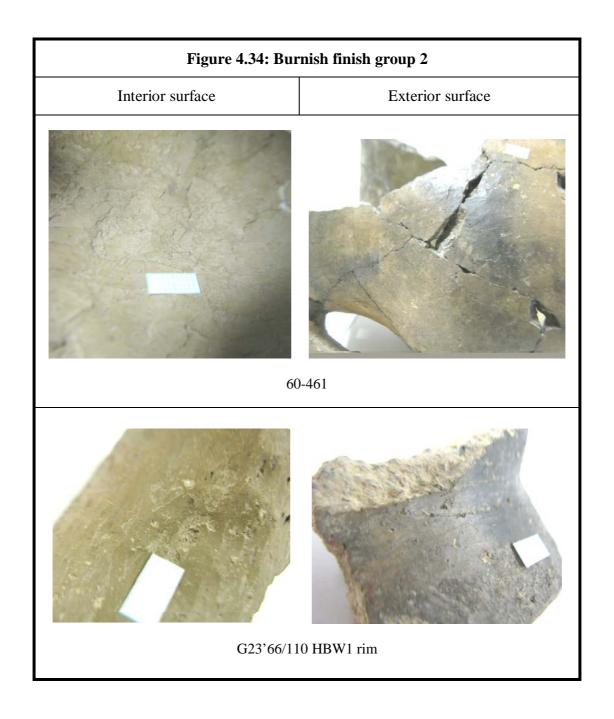


G23'64/221 HBW1 rim: Exterior surface, fracture and interior surface









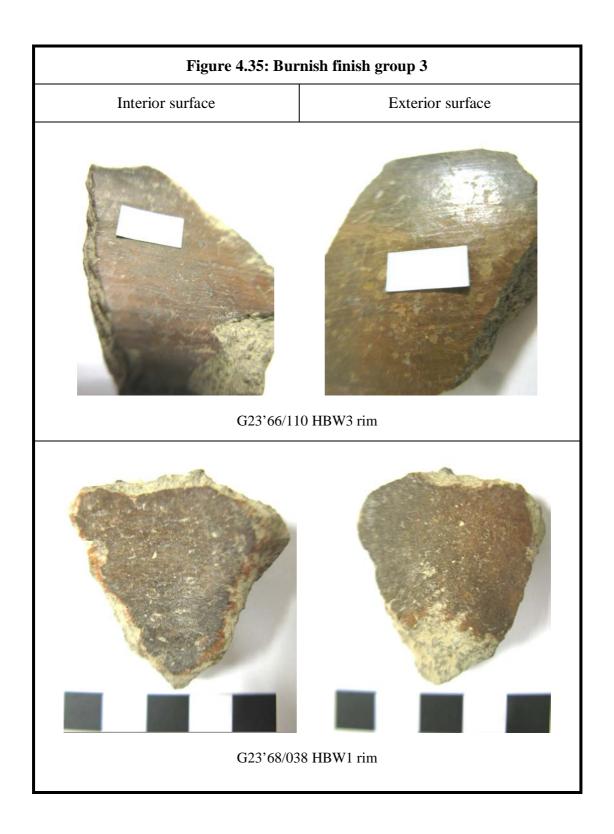


Figure 4.36: Various burnish marks on exterior surfaces								
Wide	Deep grooves							
G23'66/110 HBW4 bs	G23'64/173 HBW3 base							
Straw-like	While clay still wet							
64-456	66-0480							

Figure 4.37: Comparisons between HBW and Mycenaean cooking pot vessels **HBW 66-0480** Mycenaean ware 68-453 Orangy/red and powdery white inclusions Interior surface Interior surface Exterior surface Exterior surface Firing Fracture Fracture Exterior surface Exterior surface